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Ser	Leu	Leu	Phe	Leu	Ala	Ala	Glu	Gln	Leu	Leu	Glu	Asp	Leu	Arg	Asn
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Asp	Ser	Ser	Asp	Tyr	Val	Val	Cys	Pro	Trp	Ser	Ala	Leu	Leu	Ser	Ala
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Ala	G1 y	Ser	Leu	Ser	Phe	Gln	Gly	Arg	Val	Ser	His	He	Glu	Ala	Ala
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Pro	Phe	Lys	Ala	Pro	Glu	Leu	Leu	Gln	Gly	Gln	Ser	Glu	Asp	Glu	Gln
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Ser	Val	Leu	Glu	Ala	Cys	Arg	Val	His	Glu	Lys	Glu	Val	Ser	Val	Tyr
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Ser	Gln	Arg	Gly	Phe	Leu	Gln	Arg	Arg	Ser	Lys	Phe	Ser	Arg	Pro	Glu

		275					280					285			
Phe	lle	Leu	Leu	Ala	Gly	Glu	Ala	Pro	Met	Thr	Leu	His	Leu	Pro	G1 y
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Cys	Val	Val	Leu	Leu	Asn	Gly	Gln	His	Leu	Glu	Val	Lys	Cys	Лѕр	Val
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Leu	Glu	Glu	Leu	Thr	Tyr	Phe	Gly	Leu	Ala	Tyr	Met	Lys	Ser	Lys	G] u
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Phe	Phe	Phe	Leu	Asp	Ser	Glu	Thr	Arg	Leu	Cys	Lys	He	Ala	Pro	Glu
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Gly	Trp	Arg	Glu	Gln	Pro	Gln	Lys	Thr	Ser	Met	Asn	Thr	Phe	Thr	Leu
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465		m			470		0.1		0.1	475					480
Arg	Met	Thr	Ala		Arg	Val	GIn	Val			Ser	Glu	Met		Arg
	C		4.1	485	T	C1	C1		490			C.1	DI	495	
Leu	Ser	Ser		Leu	Irp	Gly	Glu		Ala	Glu	Leu	Glu		Leu	Arg
V 1	T1	C1	500	1	D	C1	т	505	V . 1	1	W - 1	112.	510	V - 1	DI.
vaı	inr		Gin	Leu	Pro	Glu		61 y	vai	Leu	vai		GIN	val	Pne
Can	C1	515	A : 20 cm	A 20.00	Duo	C1	520	C1	Mat	۸1	Lan	525	11.	Cum	A 1
ser		Lys	Arg	Arg	Pro	Glu	GIU	Glu	wet	MIA		01 y	116	Cys	Ата
Lva	530	Vel	11.	V _c 1	Tur	535	Vel	1	1.00	۸	540	A 1-~	71.	۸1.	Mat
Lys 545	01 y	val	116	val	550	Glu	val	LyS	ASII	555	Sel.	wrg	116	ита	ме t 560
	Ara	Pho	Gla	Tro		Glu	Thr	Glv	Lve		Ser	The	Tyr	Gla	

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Lys	Phe	Thr	He	Thr	Ser	Ser	Val	Thr	Gly	Lys	Lys	His	Thr	Phe	Val
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Thr	Asp	Ser	Ala	Lys	Thr	Ser	Lys	Tyr	Leu	Leu	Asp	Leu	Cys	Ser	Ala
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Gln	His	Gly	Phe	Asn	Ala	Gln	Met	Gly	Ser	Gly	Gln	Pro	Ser	His	Val
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His	Gln	Ala	Arg	Ser	Lys	Pro	Leu	He	Trp	Ile	Gln	Arg	Leu	Ser	Cys
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Ser	Glu	Asn	Glu	Leu	Phe	Val	Ser	Arg	Leu	Gln	Gly	Ala	Ala	Gly	Gly
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Leu	Leu	Ser	Thr	Ser	Met	Asp	Asn	Phe	Asn	Val	Λsp	Gly	Ser	Lys	Glu
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Ala	Gly	Ala	Glu	G1y	He	Gly	Arg	Ser	Pro	Cys	Thr	Gly	Arg	Glu	Gln
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		755					760					765			
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	770					775					780				
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785					790					795	5 3	ar.ı	D)		800
He	Leu	Ala	Leu		His	He	Ser	Leu		Gly	Phe	Ihr	Phe		Met
	V 1			805	G.)		C	Б	810			C1		815	11
Ala	Val	Arg		116	Gln	Asn	Ser		Asp	Asn	116	610		11e	11e
C	0.1	C	820	0.1	12. 1	C.I	61	825		מ		CI	830	1	Α
ser	GIN		LŸS	ыу	Val	61 y		ASN	nsn	rro	ASP		oin	LYS	ASN
C1	Th	835	Λ	C ~	Cl _v	V ~ 1	840	S = -	Tha	100	11.	845	Son	Dha	61

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Thr	Asn	Arg	Asp	Gln	Asp	Gln	Thr	His	Ser	Ser	Leu	Ser	Gly	Gln	Tyr
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Gly	Pro	Val	He	Ser	Lys	Val	Tyr	lle	Gly	Gly	Tyr	Pro	Val	Ser	Thr
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	975					970					965				
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Met	Ser	Asp	Asn			Pro	Cys	G1n			Ser	Arg	Pro		
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		Pro	Leu	Ala			Leu	Ser	Val			Arg	Glu	Asp	Gly
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Lys	Val	Glu								1030					102
			Pne	Lys	Pro	Gly		Thr	Val		Val	Cys	Ser		
0.3	1055	1				G1 y 1050				Ser	Val 1045	j		Ser	Pro
Glu		Gln	Val			G1 y 1050	Gly	Leu		Ser	Val 1045	Asn	Lys	Ser	Pro
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Arg Gly Phe 1120 Leu	Lys Ala Ile Thr	Gln 1070 Ile Ala Leu Val	Val Arg 1085 lle Gly Glu	Phe Val Ala 1100 Glu Gln	Ser Leu Gly Thr H115 Pro	Gly 1050 Phe Asp Asn Ser Ala	Gly 1065 Ser Glu Arg	Leu Lys 1080 Glu Gly Arg	Gly Leu Ala 1095 Asn Leu	Asn His Pro Val HIO Leu	Val 1045 Ala Ser Gln Ala His	Asn 1060 Cys Gly Leu	Lys Ser 1075 Pro 11e	Ser Lys Glu Phe 1090 Tle Glu	Pro Leu Lys Leu Asp 1106

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Trp Gln Thr P	ro Glu	Leu Sei	r Ala	Asp	Lys	Glu	Phe	Thr	Arg	Ala	Thr
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Cys Thr Asp S	er Cys	Thr Set	r Pro	11e	Leu	Asp	Gln	Glu	Asp	Ser	Trp
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Glu Ser Ser G	an Lys	Ala Ile	e Arg	Glu	Ala	Gln	Trp	Gly	Gln	Asn	Arg
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Glu Arg Pro T	rp Ala	Ser Se	r Leu	Thr	His	Ser	Pro	Glu	Ser	His	Pro
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His Leu Cys L	.ys Leu	His Gl	ı Glu	Arg	Asp	Glu	Ser	Thr	Leu	Ala	Thr
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Ser Leu Glu L	ys Asp	Val Ar	g Gln	Asn	Cys	Tyr	Ser	Val	Cys	Asp	Пе
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Met Arg Leu G	ly Arg	Tyr Se	r Phe	Ser	Ser	Pro	Leu	Thr	Arg	Leu	Ser
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Leu Leu Leu L	.eu Leu	Leu Pr	o Pro	Leu	Leu	Leu	Leu	Ala	Gly	Ala	Val
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Pro Pro Gly A	arg Gly	Arg Al	a Ala	Gly	Pro	Gln	Glu	Asp	Val	Asp	Glu
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Cys Ala Gln G	ly Leu	Asp As	p Cys	His	Ala	Asp	Ala	Leu	Cys	Gln	Asn

Ihr	Pro	Inr	Ser	ıyr	Lys	Cys	5er	Cys	Lys	Pro	бту	Fyr	GIn	біу	GIU
65					70					75					80
Gly	Arg	Gln	Cys	Glu	Asp	Пе	Asp	Glu	Cys	Gly	Asn	Glu	Leu	Asn	Gly
				85					90					95	
Gly	Cys	Val	His	Asp	Cys	Leu	Asn	He	Pro	Gly	Asn	Tyr	Arg	Cys	Thr
			100					105					110		
Cys	Phe	Asp	Gly	Phe	Met	Leu	Ala	His	Asp	Gly	His	Asn	Cys	Leu	Asp
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Val	Asp	Glu	Cys	Leu	Glu	Asn	Asn	Gly	Gly	Cys	Gln	His	Thr	Cys	Val
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Asn	Va]	Met	Gly	Ser	Tyr	Glu	Cys	Cys	Cys	Lys	Glu	Gly	Phe	Phe	Leu
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Ser	Asp	Asn	Gln	His	Thr	Cys	He	His	Arg	Ser	Glu	Glu	Gly	Leu	Ser
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Cys	Met	Asn	Lys	Λsp	His	Gly	Cys	Ser	His	He	Cys	Lys	Glu	Ala	Pro
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Arg	Gly	Ser	Val	Ala	Cys	Glu	Cys	Arg	Pro	G1 y	Phe	Glu	Leu	Ala	Lys
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Asn	Gln	Arg	Asp	Cys	He	Leu	Thr	Cys	Asn	His	Gly	Asn	Gly	Gly	Cys
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225					230					235					240
Pro	Gln	Tyr	Lys		llis	Thr	Asp	G1 y	Arg	Ser	Cys	Leu	Glu	Arg	Glu
				245					250					255	
Asp	Thr	Val	Leu	Glu	Val	Thr	G] u	Ser	Asn	Thr	Thr	Ser		Va]	Asp
			260					265					270		
Gly	Asp		Arg	Val	Lys	Arg		Leu	Leu	Met	G] u		Cys	Ala	Val
		275					280	_				285			
Asn		G1 y	G1 y	Cys	Asp		Thr	Cys	Lys	Asp		Ser	Thr	G1 y	Va]
	290		_			295					300				
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305					310	0		(C)		315	<i>c</i> 1	<i>a</i> :			320
Cys	Lys	Asp	He		Glu	Cys	GIn	Thr		Asn	Gly	Gly	Cys	Asp	His
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Ser	Leu	Asp	Arg	Thr	Cys	Asp	His	Ser	Cys	He	Asn	llis	Pro	Gly	Thr
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Phe	Ala	Cys	Ala	Cys	Asn	Arg	G1 y	Tyr	Thr	Leu	Tyr	Gly	Phe	Thr	His
385					390					395					400
Cys	Gly	Лsp	Thr	Asn	Glu	Cys	Ser	He	Asn	Asn	Gly	Gly	Cys	Gln	Gln
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Val	Cys	Val	Asn	Thr	Val	Gly	Ser	Tyr	Glu	Cys	Gln	Cys	His	Pro	Gly
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Tyr	Lys	Leu	His	Trp	Asn	Lys	Lys	Asp	Cys	Val	Glu	Val	Lys	Gly	Leu
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Ser	Ser	Gly	Leu	Gln	Gly	Ala	Tyr	Ser	Val	Thr	Cys	Gly	Ser	Ser	Ser
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Pro	Leu	Arg	Asn	Lys	Gln	Gln	Lys	Ser	Λsn	Asp	Ser	Ala	Phe	Gly	Asp
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Val	Thr	Th.r	lle	Arg	Thr	Ser	Val	Thr	Phe	Lys	Leu	Asn	Glu	Gly	Lys
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Leu	Thr	Cys	Ser		G1 y	Lys	Gln	Val	Pro	Gly	Ala	Pro	Gly	Arg	Pro
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Ser	Thr	Pro		Glu	Met	Phe	He		Val	Glu	Phe	G1u	Leu	Glu	Thr
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Asn	Gln		G]u	Va]	Thr	Ala	Ser	Cys	Asp	Leu	Ser	Cys	He	Va]	Lys
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Arg		Glu	Lys	Arg	Leu		Lys	Ala	He	Arg		Leu	Arg	Lys	Ala
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Val	His	Arg	Glu	Gln	Phe	His	Leu	Gln	Len	Ser	Glv	Met	Asn	Leu	Asn

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G] y	Val	Gly	Gln	Gly	His	Ala	Glu	Asn	Gln	Cys	Gly	Leu	Cys	Gln	Pro
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705					710					715					720
Glu	Thr	Arg	Va]	Gln	Cys	Ser	Pro	G1y	His	Phe	Tyr	Asn	Thr	Thr	Thr
				725					730					735	
His	Arg	Cys	He	Arg	Cys	Pro	Val	G1 y	Thr	Tyr	Gln	Pro	Glu	Phe	Gly
			740					745					750		
Lys	Asn	Asn	Cys	Val	Ser	Cys	Pro	Gly	Asn	Thr	Thr	Thr	Asp	Phe	Asp
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Gly	Ser	Thr	Asn	Ile	Thr	Gln	Cys	Lys	Asn	Arg	Arg	Cys	Gly	Gly	Glu
	770					775					780				
Leu	Gly	Asp	Phe	Thr	Gly	Tyr	lle	Glu	Ser	Pro	Asn	Tyr	Pro	Gly	Asn
Leu 785	Gly	Asp	Phe	Thr	Gly 790	Tyr	lle	Glu	Ser	Pro 795	Asn	Tyr	Pro	Gly	Asn 800
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785 Tyr Arg Asp	Pro Arg	Ala Ile Gly 835	Asn Leu 820 Asp	Thr 805 11e Tyr	790 Glu Val Leu	Cys Val Val	Thr Pro Met 840	Trp Glu 825 Arg	Thr 810 11e Lys	795 lle Phe Thr	Asn Leu Ser	Pro Pro Ser 845	Pro Ile 830 Ser	Pro 815 Glu Asn	800 Lys Asp Ser
785 Tyr Arg Asp	Pro Arg Cys	Ala Ile Gly 835	Asn Leu 820 Asp	Thr 805 11e Tyr	790 Glu Val Leu	Cys Val Val	Thr Pro Met 840	Trp Glu 825 Arg	Thr 810 11e Lys	795 lle Phe Thr	Asn Leu Ser	Pro Pro Ser 845	Pro Ile 830 Ser	Pro 815 Glu Asn	800 Lys Asp Ser
785 Tyr Arg Asp Val	Pro Arg Cys	Ala 11e Gly 835 Thr	Asn Leu 820 Asp	Thr 805 11e Tyr Glu	790 Glu Val Leu Thr	Cys Val Val Cys 855	Thr Pro Met 840 Gln	Trp Glu 825 Arg Thr	Thr 810 1le Lys	795 lle Phe Thr	Asn Leu Ser Arg 860	Pro Pro Ser 845 Pro	Pro He 830 Ser	Pro 815 Glu Asn	800 Lys Asp Ser Phe
785 Tyr Arg Asp Val	Pro Arg Cys Thr 850	Ala 11e Gly 835 Thr	Asn Leu 820 Asp	Thr 805 11e Tyr Glu	790 Glu Val Leu Thr	Cys Val Val Cys 855	Thr Pro Met 840 Gln	Trp Glu 825 Arg Thr	Thr 810 1le Lys	795 lle Phe Thr	Asn Leu Ser Arg 860	Pro Pro Ser 845 Pro	Pro He 830 Ser	Pro 815 Glu Asn	800 Lys Asp Ser
785 Tyr Arg Asp Val Thr 865	Pro Arg Cys Thr 850	Ala 11e Gly 835 Thr	Asn Leu 820 Asp Tyr	Thr 805 11e Tyr Glu Lys	790 Glu Val Leu Thr Lys 870	Cys Val Val Cys 855 Leu	Thr Pro Met 840 Gln Trp	Trp Glu 825 Arg Thr	Thr 810 1le Lys Tyr	795 lle Phe Thr Glu Phe 875	Asn Leu Ser Arg 860 Lys	Pro Pro Ser 845 Pro Ser	Pro He 830 Ser He Asn	Pro 815 Glu Asn Ala Glu	800 Lys Asp Ser Phe Gly 880
785 Tyr Arg Asp Val Thr 865	Pro Arg Cys Thr 850 Ser	Ala 11e Gly 835 Thr	Asn Leu 820 Asp Tyr	Thr 805 11e Tyr Glu Lys	790 Glu Val Leu Thr Lys 870	Cys Val Val Cys 855 Leu	Thr Pro Met 840 Gln Trp	Trp Glu 825 Arg Thr	Thr 810 1le Lys Tyr	795 lle Phe Thr Glu Phe 875	Asn Leu Ser Arg 860 Lys	Pro Pro Ser 845 Pro Ser	Pro He 830 Ser He Asn	Pro 815 Glu Asn Ala Glu	800 Lys Asp Ser Phe Gly 880
785 Tyr Arg Asp Val Thr 865 Asn	Pro Arg Cys Thr 850 Ser	Ala 11e Gly 835 Thr Arg	Asn Leu 820 Asp Tyr Ser	Thr 805 11e Tyr Glu Lys Gly 885	790 Glu Val Leu Thr Lys 870 Phe	Cys Val Val Cys 855 Leu Gln	Thr Pro Met 840 Gln Trp	Trp Glu 825 Arg Thr	Thr 810 1le Lys Tyr Gln Tyr 890	795 lle Phe Thr Glu Phe 875 Val	Asn Leu Ser Arg 860 Lys Thr	Pro Pro Ser 845 Pro Ser Tyr	Pro He 830 Ser He Asn	Pro 815 Glu Asn Ala Glu Glu 895	800 Lys Asp Ser Phe Gly 880 Asp
785 Tyr Arg Asp Val Thr 865 Asn	Pro Arg Cys Thr 850 Ser	Ala 11e Gly 835 Thr Arg	Asn Leu 820 Asp Tyr Ser	Thr 805 11e Tyr Glu Lys Gly 885	790 Glu Val Leu Thr Lys 870 Phe	Cys Val Val Cys 855 Leu Gln	Thr Pro Met 840 Gln Trp	Trp Glu 825 Arg Thr	Thr 810 1le Lys Tyr Gln Tyr 890	795 lle Phe Thr Glu Phe 875 Val	Asn Leu Ser Arg 860 Lys Thr	Pro Pro Ser 845 Pro Ser Tyr	Pro He 830 Ser He Asn	Pro 815 Glu Asn Ala Glu Glu 895	800 Lys Asp Ser Phe Gly 880 Asp

| Ser | Leu | Phe | Asp | Val | Leu | Ala | His | Pro | Gln | Asn | Tyr | Phe | Lys | Tyr | Thr | Ala | 930 | 935 | 935 | 940 | 940 | 940 | 940 | 940 | 940 | 945 | 940 | 940 | 940 | 945 | 940 | 945 | 955 | 955 | 955 | 960 | 960 | 965 | 965 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970 | 970

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<212> PRT

<213> Homo sapiens

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Ala Ala Gly Phe His Leu Glu Tyr Lys Thr Val Gly Leu Ser Ser Cys
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Pro Glu Pro Ala Val Pro Ser Asn Gly Val Lys Thr Gly Glu Arg Tyr 50 55 60

Leu Val Asn Asp Val Val Ser Phe Gln Cys Glu Pro Gly Tyr Ala Leu 65 70 75 80

Gln Gly His Ala His Ile Ser Cys Met Pro Gly Thr Val Arg Arg Trp

85 90 95

Asn Tyr Pro Pro Pro Leu Cys lle Ala Gln Cys Gly Gly Thr Val Glu 100 105 110

Glu Met Glu Gly Val Ile Leu Ser Leu Gly Phe Pro Gly Asn Tyr Pro 115 120 125

Ser Asn Met Asp Cys Ser Trp Lys Ile Ala Leu Pro Val Gly Phe Gly
130 135 140

Ala His lle Gln Phe Leu Asn Phe Ser Thr Glu Pro Asn His Asp Tyr 145 150 155 160

Ile Glu Ile Arg Asn Gly Pro Tyr Glu Thr Ser Arg Met Met Gly Arg

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Phe	Ser	Gly	Ser	Glu	Leu	Pro	Ser	Ser	Leu	Leu	Ser	Thr	Ser	His	Glu
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Thr	Thr	Val	Tyr	Phe	His	Ser	Asp	His	Ser	Gln	Asn	Arg	Pro	Gly	Phe
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Lys	Leu	Glu	Tyr	Gln	Ala	Tyr	Glu	Leu	Gln	Glu	Cys	Pro	Asp	Pro	Glu
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Pro	Phe	Ala	Asn	Gly	He	Val	Arg	Gly	Ala	Gly	Tyr	Asn	Val	Gly	G]n
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Ser	Val	Thr	Phe	Glu	Cys	Leu	Pro	Gly	Tyr	Gln	Leu	Thr	Gly	His	Pro
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Val	Leu	Thr	Cys	Gln	His	Gly	Thr	Asn	Arg	Asn	Trp	Asp	His	Pro	Leu
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Pro	Lys	Cys	Glu	Val	Pro	Cys	Gly	Gly	Asn	He	Thr	Ser	Ser	Asn	Gly
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Thr	Val	Tyr	Ser	Pro	Gly	Phe	Pro	Ser	Pro	Tyr	Ser	Ser	Ser	Gln	Asp
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Cys	Val	Trp	Leu	Ile	Thr	Val	Pro	lle	Gly	His	Gly	Val	Arg	Leu	Asn
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Leu	Ser	Leu	Leu	Gln	Thr	Glu	Pro	Ser	Gly	Asp	Phe	He	Thr	He	Trp
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Met	Ala	Lys	Lys	Thr	Val	Gln	Ser	Ser	Ser	Asn	Gln	Val	Leu	Leu	Lys
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Phe	His	Arg	Asp	Ala	Ala	Thr	Gly	G1 y	lle	Phe	Ala	lle	Ala	Phe	Ser
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Asp	His	Cys	Arg	Tyr	Phe	Asn	Gln	Lys	Ser	Gly	Lys	Leu	Asp	Phe	
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Pro	Ser	Ser	Thr	Leu	Gly	Gln	Leu	Cys	Lys	Thr	Leu	His	Arg	Ser	Leu
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Pro	His	Leu		Leu	Gln	Phe	Leu		Leu						
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                                                     30
             20
Ile Arg Glu Leu Glu Lys Gln Met Glu Asp Ala Tyr Arg Gly Thr Lys
                             40
Arg Lys Met Leu Pro Ser Ser Ser Ser Arg Met Arg Ser Asp Gly Phe
     50
                         55
Asp Glu Glu Ser Gln Arg Tyr Tyr Trp Arg Pro Lys Asn Glu lle Ser
                     70
                                         75
Gly Thr Leu Glu Asp Asp Phe Leu Lys Ala Lys Ser Trp Asn Lys Lys
                                     90
                85
Phe Tyr Asp Tyr Glu Ala Asn Met Pro Asp Arg Trp Gly His Ser Gly
                                105
                                                    110
            100
Tyr Lys Glu Leu Tyr Pro Glu Glu Phe Glu Thr Asn Ser Asp Gln Gln
                            120
Asp Ile Thr Asn Gly Lys Lys Thr Ser Pro Gln Val Lys Ser Ser Thr
    130
                        135
                                            140
His Glu Ser Arg Lys His Lys Lys Ser Lys Lys Ser His Lys Lys
                    150
                                        155
Gln Lys Lys Arg Ser His Lys Lys Gln Lys Lys Ser Lys Lys Glu Ala
                165
                                    170
Thr Asp Ile Thr Ala Asp Ser Ser Glu Phe Ser Glu Glu Thr Gly
            180
                                185
                                                    190
Ala Ser Gly Thr Arg Lys Gly Lys Gln Pro His Lys Arg Lys Lys
                            200
                                                205
Ser Arg Lys Lys Ser Leu Lys Lys Pro Ala Leu Phe Leu Glu Ala Glu
                        215
                                            220
    210
Ser Asn Thr Ser His Ser Asp Asp Ser Ala Ser Ser Ser Glu Glu
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Lys Ala His Thr Ser Val Ala Asn Asn Glu Ile Gln Glu Arg Thr Asn Lys Arg Thr Asn Trp Lys Val Ala Thr Asp Glu Arg Ser Ala Glu Ser Ser Glu Asp Asp <210> 3220 <211> 1023 <212> PRT <213> Homo sapiens <400> 3220 Met Ser Leu Gly Val Ala Ala 11e Asn Gln Ala 11e Lys Glu Gly Lys Ala Ala Gln Thr Glu Arg Val Leu Arg Asn Pro Ala Val Ala Leu Arg Gly Val Val Pro Asp Cys Ala Asn Gly Tyr Gln Arg Ala Leu Glu Ser Ala Met Ala Lys Lys Gln Arg Pro Ala Asp Thr Ala Phe Trp Val Gln His Asp Met Lys Asp Gly Thr Ala Tyr Tyr Phe His Leu Gln Thr Phe Gln Gly 11e Trp Glu Gln Pro Pro Gly Cys Pro Leu Asn Thr Ser His Leu Thr Arg Glu Glu lle Gln Ser Ala Val Thr Lys Val Thr Ala Ala Tyr Asp Arg Gln Gln Leu Trp Lys Ala Asn Val Gly Phe Val Ile Gln Leu Gln Ala Arg Leu Arg Gly Phe Leu Val Arg Gln Lys Phe Ala Glu His Ser His Phe Leu Arg Thr Trp Leu Pro Ala Val Ile Lys Ile Gln

Ala His Trp Arg Gly Tyr Arg Gln Arg Lys lle Tyr Leu Glu Trp Leu

				165					170					175	
Gln	Tyr	Phe	Lys	Ala	Asn	Leu	Asp	Ala	He	Πe	Lys	He	Gln	Ala	Trp
			180					185					190		
Ala	Arg	Met	Trp	Ala	Ala	Arg	Arg	Gln	Tyr	Leu	Arg	Arg	Leu	His	Tyr
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Phe	Gln	Lys	Λsn	Val	Asn	Ser	He	Val	Lys	He	G]n	Ala	Phe	Phe	Arg
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225					230					235					240
Pro	Pro	Leu	Ser	Val	Val	Arg	Arg	Phe	Λla	His	Leu	Leu	Asn	Gln	Ser
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Gln	Gln	Asp	Phe	Leu	Ala	Glu	Ala	Glu	Leu	Leu	Lys	Leu	Gln	Glu	Glu
			260					265					270		
Val	Val	Arg	Lys	He	Arg	Ser	Asn	GIn	Gln	Leu	Glu	Gln	Asp	Leu	Asn
		275					280					285			
He	Met	Asp	lle	Lys	11e	Gly	Leu	Leu	Val	Lys	Asn	Arg	He	Thr	Leu
	290					295					300				
Gln	Glu	Val	Val	Ser	His	Cys	Lys	Lys	Leu	Thr	Lys	Arg	Asn	Lys	Glu
305					310					315					320
Gln	Leu	Ser	Asp	Met	Met	Val	Leu	Asp	Lys	Gln	Lys	Gly	Leu	Lys	Ser
				325					330					335	
Leu	Ser	Lys	Glu	Lys	Arg	Gln	Lys	Leu	Glu	Ala	Tyr	Gln	His	Leu	Phe
			340					345					350		
Tyr	Leu	Leu	Gln	Thr	Gln	Pro	lle	Tyr	Leu	Ala	Lys	Leu	He	Phe	Gln
		355					360					365			
Met	Pro	Gln	Asn	Lys	Thr	Thr	Lys	Phe	Met	Glu	Ala	Val	lle	Phe	Ser
	370					375					380				
Leu	Tyr	Asn	Tyr	Ala	Ser	Ser	Arg	Arg	G] u	Ala	Tyr	Leu	Leu	Leu	Gln
385					390					395					400
Leu	Phe	Lys	Thr	Ala	Leu	Gln	GIu	Glu	He	Lys	Ser	Lys	Val	Glu	Gln
				405					410					415	
Pro	Gln	Asp	Va]	Val	Thr	Gly	Asn	Pro	Thr	Val	Val	Arg	Leu	Val	Val
			420					425					430		
Arg	Phe	Tyr	Arg	Asn	Gly	Arg	Gly	Gln	Ser	Ala	Leu	Gln	Glu	lle	Leu
		435					440					445			
Gly	Lys	Val	He	G1n	Asp	Val	Leu	Glu	Asp	Lys	Val	Leu	Ser	Val	His

	450					455					460				
Thr	Asp	Pro	Val	His	Leu	Tyr	Lys	Asn	Trp	11e	Asn	Gln	Thr	Glu	Ala
465					470					475					480
Gln	Thr	Gly	Gln	Arg	Ser	His	Leu	Pro	Tyr	Asp	Val	Thr	Pro	Glu	Gln
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Ala	Leu	Ser	His	Pro	Glu	Val	Gln	Arg	Arg	Leu	Asp	He	Ala	Leu	Arg
			500					505					510		
Asn	Leu	Leu	Ala	Met	Thr	Asp	Lys	Phe	Leu	Leu	Ala	He	Thr	Ser	Ser
		515					520					525			
Val	Asp	Gln	Ile	Pro	Tyr	Gly	Met	Arg	Tyr	Val	Ala	Lys	Val	Leu	Lys
	530					535					540				
Ala	Thr	Leu	Ala	Glu	Lys	Phe	Pro	Asp	Ala	Thr	Asp	Ser	Glu	Val	Tyr
545					550					555					560
Lys	Val	Val	Gly	Asn	Leu	Leu	Tyr	Tyr	Arg	Phe	Leu	Asn	Pro	Ala	Val
				565					570					575	
Val	Ala	Pro	Asp	Ala	Phe	Asp	He	Val	Ala	Met	Ala	Ala	Gly	Gly	Ala
			580					585					590		
Leu	Ala	Ala	Pro	Gln	Arg	His	Ala	Leu	Gly	Ala	Val	Ala	Gln	Leu	Leu
		595					600					605			
Gln		Ala	Ala	Ala	Gly		Ala	Phe	Ser	Gly		Ser	Gln	His	Leu
	610					615					620				
	Val	Leu	Asn	Asp		Leu	Glu	Glu	Thr		Leu	Lys	Phe	Arg	
625					630					635					640
Phe	He	His	Arg		Cys	GIn	Val	Pro		Pro	Glu	Glu	Arg		Ala
		0.1		645			,, ,		650			15		655	T.
Val	Asp	Glu		Ser	Asp	Met	Val		Val	Ala	Lys	Pro		Val	lyr
	T)	V 1	660	C1		V 1		665	112.		•	1	670	C1	112 -
11e	Inr	Val	Gly	GIU	Leu	val		Inr	111\$	Arg	Leu		Leu	GIU	HIS
C1	Λ	675	11.	110	Dag	A an	680	C1.5	100	Dua	Lau	685	C1	Lou	Lou
GIH	690	Cys	116	MIA	110	695	1115	GIII	nsp	110	700	1115	G1u.	Leu	Leu
Clu		Leu	Clv	Clu	Lou		Thr	110	Pro	Acn		Llo	C1v	Clu	Sor
0 j U	ush	เซน	01 y	010	Leu	110	1111	116	110	ush	1,61	116	01 y	010	261
705					710					715					720
	Ala	Ala	Asp	G1 v		Thr	Asp	Leu	Ser		Leu	Glu	Val	Ser	
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Thr	Leu	Thr		Lys	Phe	Glu	Gly		Glu	Ala	Asp	Ala		Asp	Ser
			740					745					750		
Asn	Thr		Ser	Leu	Leu	Leu		Thr	Lys	Gln	Leu		Ala	Asp	Пе
		755					760					765			
He	Gln	Phe	His	Pro	Gly		Thr	Leu	Lys	G1 u		Leu	Ser	Leu	Ser
	770					775					780				
	Ser	Arg	Glu	Gln		Ala	Ala	His	Lys		Leu	Met	Ser	Arg	Arg
785					790					795					800
Gln	Ala	Cys	Thr		Gln	Thr	Pro	Glu		Leu	Arg	Arg	His		Ser
				805					810					815	
Leu	Thr	Ala		Ser	Leu	Leu	Pro		Ala	Glu	Lys	Gln	Arg	Arg	Val
			820					825					830		
Leu	Arg		Leu	Arg	Arg	Leu	Glu	Ala	Leu	Gly	Leu	Val	Ser	Ala	Arg
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Asn	Gly	Tyr	Gln	Gly	Leu		Asp	Glu	Leu	Ala	Lys	Asp	lle	Arg	Asn
	850					855					860				
Gln	His	Arg	His	Arg		Arg	Arg	Lys	Ala	Glu	Leu	Val	Lys	Leu	G1n
865					870					875		•			880
Ala	Thr	Leu	Gln	Gly	Leu	Ser	Thr	Lys	Thr	Thr	Phe	Tyr	Glu	Glu	Gln
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			900					905					910		
Pro	Asp	Ser	Lys	Ser	Ser	Gly	Lys	Gly	Lys	Lys	G1n	Pro	Ser	Leu	His
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Tyr	Thr	Ala	Лlа	Gln	Leu	Leu	Glu	Lys	Gly	Val	Leu	Val	Glu	He	Glu
	930					935					940				
Asp	Leu	Pro	Ala	Ser	His	Phe	Arg	Asn	Val	lle	Phe	Asp	Пe	Thr	Pro
945					950					955					960
Gly	Asp	G]u	Ala	Gly	Lys	Phe	Glu	Val	Asn	Ala	Lys	Phe	Leu	Gly	Va1
				965					970					975	
Asp	Met	Glu	Arg	Phe	Gln	l.eu	His	Tyr	Gln	Asp	Leu	Leu	GIn	Leu	Gln
			980					985					990		
Tyr	Glu	Gly	Va]	Ala	Val	Met	Lys	Leu	Phe	Asn	Lys	Ala	Lys	Val	Asn
		995				1	000				J	005			
Val	Asn	Leu	Leu	lle	Phe	Leu	Leu	Asn	Lys	Lys	Phe	Leu	Arg	Lys	
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<210> 3221

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				245					250					255	
Ser	Glu	He	Lys	lle	Ser	Lys	Ser	Asn	Asn	Gln	Asn	Val	Glu	Pro	His
			260					265					270		
Lys	Arg	Leu	Leu	Lys	Val	Arg	Ser	Met	Val	Glu	Gly	Leu	Gly	Gly	Pro
		275					280					285			
Leu	Gly	His	Ala	Gly	Glu	Glu	Ser	Glu	Val	Asp	Asn	Asp	Val	Asp	Ser
	290					295					300				
Pro	Gly	Ser	Leu	Arg	Arg	G1 y	Leu	Arg	Ser	Thr	Ser	Tyr	Arg	Arg	Ala
305					310					315					320
Val	Val	Ser	Gly	Phe	Asp	Phe	Asp	Ser	Pro	Thr	Ser	Ser	Lys	Lys	Lys
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Asn	Arg	Met	Ser	Gln	Pro	Val	Leu	Lys	Val	Val	Met	Glu	Asp	Lys	Glu
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Lys	Phe	Ser	Ser	Leu	Gly	Arg	lle	Lys	Lys	Lys	Met	Leu	Lys	Gly	Gln
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Gly	Thr	Phe	Asp	Gly	Glu	Glu	Asn	Ala	Val	Leu	Tyr	Gln	Asn	Tyr	Lys
	370					375					380				
Glu	Lys	Ala	Leu	Asp	lle	Asp	Ser	Asp	Glu	Glu	Ser	Glu	Pro	Lys	Glu
385					390					395					400
Gln	Lys	Ser	Asp	Glu	Lys	He	Val	11e	His	His	Lys	Pro	Leu	Arg	Ser
				405					410					415	
Thr	Trp	Ser	Gln	Leu	Ser	Λla	Val	Lys	Arg	Lys	Gly	Leu	Ser	GIn	Thr
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Va]	Ser	Gln	Glu	Glu	Arg	Lys	Ārg	Gln	Glu	Ala	lle	Phe	Glu	Val	He
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Ser	Ser	Glu	His	Ser	Tyr	Leu	Leu	Ser	Leu	Glu	He	Leu	lle	Arg	Met
	450					455					460				
	Lys	Asn	Ser	Lys		Leu	Ser	Asp	Thr		Thr	Lys	Thr	Glu	
465					470					475					480
His	His	Leu	Phe		Asn	He	Thr	Asp		Cys	Glu	Ala	Ser		Lys
				485					490					495	
Phe	Phe	He	Glu	Leu	Glu	Ala	Arg		Gln	Asn	Asn	He		He	Asp
			500					505					510		

Asp	lle	Ser 515	Asp	lle	Val	Glu	Lys 520	His	Thr	Ala	Ser	Thr 525	Phe	Asp	Pro
Tyr	Val 530	Lys	Tyr	Cys	Thr	Asn 535	Glu	Val	Tyr	Gln	G1n 540	Arg	Thr	Leu	Gln
Lys 545	Leu	Leu	Ala	Thr	Asn 550	Pro	Ser	Phe	Lys	Gl u 555	Val	Leu	Ser	Arg	lle 560
Glu	Ser	His	Glu	Asp 565	Cys	Arg	Asn	Leu	Pro 570	Met	lle	Ser	Phe	Leu 575	
Leu	Pro	Met	G1n 580	Arg	Va]	Thr	Arg	Leu 585	Pro	Leu	Leu	Met	Asp 590	Thr	Ile
Cys	Gln	Lys 595	Thr	Pro	Lys	Asp	Ser 600	Pro	Lys	Tyr	Glu	Val 605	Cys	Lys	Arg
Ala	Leu 610	Lys	Glu	Val	Ser	Lys 615	Leu	Val	Λrg	Leu	Cys 620	Asn	Glu	Gly	Ala
Arg 625	Lys	Met	Glu	Arg	Thr 630	Glu	Met	Met	Tyr	Thr 635	lle	Asn	Ser	Gln	Leu 640
Glu	Phe	Lys	lle	Lys 645	Pro	Phe	Pro	Leu	Val 650	Ser	Ser	Ser	Arg	Trp 655	Leu
Va]	Lys	Arg	Gly 660	Glu	Leu	Thr	Ala	Tyr 665	Val	Glu	Asp	Thr	Val 670	Leu	Phe
Ser	Arg	Arg 675	Thr	Ser	Lys	G1n	G1n 680	Val	Tyr	Phe	Phe	Leu 685	Phe	Asn	Asp
Val	Leu 690	lle	He	Thr	Lys	Lys 695	Lys	Ser	Glu	Glu	Ser 700	Tyr	Asn	Val	Asn
Лsр 705	Tyr	Ser	Leu	Arg	Asp 710	G]n	Leu	Leu	Va]	Glu 715	Ser	Cys	Asp	Asn	Glu 720
G] u	Leu	Asn	Ser	Ser 725	Pro	Gly	Lys	Asn	Ser 730	Ser	Thr	Met	Leu	Tyr 735	Ser
Arg	G1n	Ser	Ser 740	Ala	Ser	His	Leu	Phe 745	Thr	Leu	Thr	Va]	Leu 750	Ser	Asn
His		Asn 755	Glu	Lys	Val	Glu	Met 760	Leu	Leu	G1 y	Ala	G1u 765	Thr	Gln	Ser
Glu	Arg 770	Ala	Arg	Trp	11e	Thr 775	Ala	Leu	Gl y	llis	Ser 780	Ser	Gly	Lys	Pro
Pro	Ala	Asp	Arg	Thr	Cys	Gly									
785					790										

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<212> PRT
<213> Homo sapiens
<400> 3222
Met Arg Val Ser Met Gln Gln Thr Ala Gln Gly Gly Pro His Gly
                  5
                                     10
Gln Arg Arg Asp Ala Asp Leu Arg Pro Ala Pro Pro Lys Leu Pro Val
                                 25
Gln Met Pro Leu Thr Pro Ser Asn Gln Gln Gln Asp Arg His Cys Val
                                                 45
        35
                             40
Arg Lys Val Gly Arg His Pro His Pro Cys Thr Ala Ala Ala Thr Pro
                         55
Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln Lys His His
                                         75
                     70
                                                              80
Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr Ser Leu Pro
                                     90
                 85
Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu Ser Val Ser
                                105
            100
                                                    110
Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val Leu Ala Ser
                            120
                                                 125
        115
Val Ser lle Ala Ser Ser Trp Pro Ser Ser Ala Arg Cys Ser Lys Pro
                        135
Thr Ala Val Glu Ala Asn Val lle Ala Leu Pro Leu Arg Arg Trp His
                                                             160
                    150
                                         155
145
Arg Asp Trp Gln Arg Cys His Leu Gly Val Cys Val Leu Ser Leu Arg
                                     170
                165
Val Gln Ala Ser Pro Ala Pro Ala Val Val Leu Gly Pro Gln Met Arg
                                185
Asp His Gly His Glu Asp Gln Pro Pro Arg Gln Pro Leu Pro Ser Ser
                                                205
        195
                            200
Leu Gly Ser Gly Val Phe
    210
```

<210> 3222 <211> 214

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<211> 155
<212> PRT
<213> Homo sapiens
<400> 3223
Met 11e Phe Lys Phe Pro Ser Ser Phe Leu Val Leu Trp Ser Leu Leu
 1
                  5
                                     10
Arg Cys Gly Arg Lys Gln Phe Val Ser Cys Ala Glu Gln Phe Arg Ser
                                 25
Pro Gly Ser Leu Ser Pro Gly Pro Lys Pro Pro Arg Arg Glu Ser Phe
         35
                             40
                                                 45
Ser Gly Pro Trp Glu Gln Val Leu Lys Gly Phe Leu Leu Lys Arg Gly
                         55
Arg Gln Pro Ala Val Arg Val Arg Ile Val Val Pro Glu Pro Tyr
                     70
 65
                                         75
Gly Gln Ser Phe Glu Arg Ile Gly Leu Gly Arg Phe Ser Gly Gln Lys
                 85
                                     90
Arg Leu Ile Ser Ile Leu Gly Ala Leu Ser His Lys Gly Tyr Leu Ile
            100
                                105
                                                    110
Glu Arg Lys Asn Gly Val Cys Gly Ser Phe Ala Pro 11e Ser Lys Trp
        115
                            120
                                                125
Val Asp Ser Gly Cys Lys Gly 11e Phe Ser His Phe Ser Gln Gln Arg
                        135
Lys Ala Phe Ser Ala Lys lle Leu Lys Gly Glu
145
                    150
                                        155
```

<210> 3224

<210> 3223

<211> 751

<212> PRT

<213> Homo sapiens

<400> 3224

Met	Arg	Leu	Lys	He	Ser	Leu	Leu	Lys	Glu	Pro	Lys	His	Gln	Glu	Leu
l				5					10					15	
Va]	Ser	Cys	Val	Gly	Trp	Thr	Thr	Ala	Glu	Glu	Leu	Tyr	Ser	Cys	Ser
			20					25					30		
Asp	Asp	His	Gln	lle	Val	Lys	Trp	Asn	Leu	Leu	Thr	Ser	Glu	Thr	Thr
		35					40					45			
Gln	lle	Val	Lys	Leu	Pro	Asp	Asp	lle	Tyr	Pro	He	Asp	Phe	His	Trp
	50					55					60				
Phe	Pro	Lys	Ser	Leu	Gly	Val	Lys	Lys	Gln	Thr	Gln	Ala	Glu	Ser	Phe
65					70					75	-				80
Val	Leu	Thr	Ser	Ser	Asp	Gly	Lys	Phe	His	Leu	lle	Ser	Lys	Leu	Gly
				85					90					95	
Arg	Val	Glu	Lys	Ser	Val	Glu	Ala	His	Cys	Gly	Ala	Val	Leu	Ala	Gly
			100					105					110		
Arg	Trp	Asn	Tyr	Glu	Gly	Thr	Ala	Leu	Val	Thr	Va1	Gly	Glu	Asp	Gly
		115					120					125			
Gln	lle	Lys	lle	Trp	Ser	Lys	Thr	Gly	Met	Leu	Arg	Ser	Thr	Leu	Ala
	130					135					140				
Gln	Gln	Gly	Thr	Pro	Va]	Tyr	Ser	Val	Ala	Trp	Gly	Pro	Asp	Ser	Glu
145					150					155					160
Lys	Val	Leu	Tyr	Thr	Ala	Gly	Lys	Gln	Leu	He	He	Lys	Pro	Leu	G1n
				165					170					175	
Pro	Asn	Ala	Lys	Val	Leu	Gln	Trp	Lys	Ala	His	Asp	Gly	He	Пе	Leu
			180					185					190		
Lys	Val		Trp	Asn	Ser	Val		Asp	Leu	He	Leu		Ala	Gly	G]u
		195	_			_	200					205			
Asp		Lys	Tyr	Lys	Val		Asp	Ser	Tyr	Gly		Pro	Leu	Tyr	Asn
0	210	Б		0.1		215	- 1				220				
	GIn	Pro	His	Glu		Pro	11e	lhr	Ser		Ala	Trp	Ala	Pro	
225	C1		151	A 7	230	C.1	C	D)		235			_	0	240
ыу	GIU	Leu	Phe		vai	GIŸ	Ser	Phe		lhr	Leu	Arg	Leu		Asp
l	TL	C1	т	245	т	4.1	,	C1	250	10	•	TI	6.1	255	
LyS	11117"	UIY	7rp	ser	ıyr	ATA	Leu		Lys	TTO.	ASII	ınr		ser	116
Dha	Aco	11.	260	Turn	 مدير ع	11.	۸	265	TL	C1	11=	A 1	270	Λ1	C
1116	nən	275	Ala	q.r.	261,	116		01 À	1111	OID	116		GIY	ата	Cys
		210					280					285			

Gly	Asn 290	Gly	His	Val	Val	Phe 295	Ala	His	Val	Val	Glu 300	Gln	His	Trp	Glu
Trp	Lys	Asn	Phe	Gln	Val	Thr	Leu	Thr	Lys	Arg	Arg	Ala	Met	GIn	Val
305					310					315					320
Arg	Asn	Val	Leu	Asn	Asp	Ala	Va]	Asp	Leu	Leu	Glu	Phe	Arg	Asp	Arg
				325					330					335	
Val	He	Lys	Ala	Ser	Leu	Asn	Tyr	Ala	His	Leu	Val	Val	Ser	Thr	Ser
			340					345					350		
Leu	G1n	Cys	Tyr	Val	Phe	Ser	Thr	Lys	Asn	Trp	Asn	Thr	Pro	He	11e
		355					360					365			
Phe	Asp	Leu	Lys	Glu	Gly	Thr	Val	Ser	Leu	lle	Leu	Gln	Ala	Glu	Arg
	370					375					380				
His	Phe	Leu	Leu	Val	Asp	Gly	Ser	Ser	lle	Tyr	Leu	Tyr	Ser	Tyr	Glu
385					390					395					400
Gly	Arg	Phe	He	Ser	Ser	Pro	Lys	Phe	Pro	Gly	Met	Arg	Thr	Asp	He
				405					410					415	
Leu	Asn	Ala	Gln	Thr	Val	Ser	Leu	Ser	Asn	Asp	Thr	lle	Ala	lle	Arg
			420					425					430		
Asp	Lys	Ala	Asp	Glu	Lys	He	He	Phe	Leu	Phe	Glu	Ala	Ser	Thr	Gly
		435					440					445			
Lys		Leu	Gly	Asp	Gly		Phe	Leu	Ser	His		Asn	Glu	He	Leu
	450					455					460				
	He	Ala	Leu	Asp		Lys	Gly	Leu	Thr		Asp	Arg	Lys	He	
465	7.1				470					475					480
Phe	He	Asp	Lys		Arg	Asp	Leu	Cys		Thr	Ser	Val	Lys	Arg	Phe
C1	1	C1	C1	485	11	11		,	490	TI		V. 1		495	,
GIŸ	Lys	61u		61n	He	He	Lys		GI y	lhr	Met	Val		Thr	Leu
41a	Т	A a.u.	500	тъ	C	Λ	77.	505	C	C1	1	Cl	510	TI	
Ата	1 rp	515	Asp	ınr	cys	Asn		Leu	Cys	61 y	Leu		Asp	Thr	Arg
Pho	По		Tun	Tur	Tur	Dro	520	Thu	Un1	т	Vo.1	525	Λ	Asp	71.
ine	530	101	пр	1 7 1	1 7 1	535	ASII	1111	vai	1 / 1	540	nsp	m g	Asp	116
Leu		lve	The	Leu	Tyr		Ara	Aen	Ala	Sor		Dho	Sor	Lys	Acn
545	110	, 5	1111	20 U	550	Jiu	an g	ענטני	11.1 CI	555	O1 U	1116	J61	rys	560
	His	Пe	Val	Ser		Val	Glv	Asn	Gln		Thr	Tle	Arσ	Arg	
-		-											- · · · · · · ·		

Asp Gly Ser Leu Val His Ile Ser Ile Pro Pro Tyr Pro Ala Ile Leu His Glu Tyr Val Ser Ser Ser Lys Trp Glu Asp Ala Val Arg Leu Cys Arg Phe Val Lys Glu Gln Thr Met Trp Ala Cys Leu Ala Ala Met Ala Val Ala Asn Arg Asp Met Thr Thr Ala Glu lle Ala Tyr Ala Ala lle Gly Glu Ile Asp Lys Val Gln Tyr Ile Asn Ser Ile Lys Asn Leu Pro Ser Lys Glu Ser Lys Met Ala His Ile Leu Leu Phe Ser Gly Asn Ile Gln Glu Ala Glu 11e Val Leu Leu Gln Ala Gly Leu Val Tyr Gln Ala Ile Gln Ile Asn Ile Asn Leu Tyr Asn Trp Glu Arg Ala Leu Glu Leu Ala Val Lys Tyr Lys Thr His Val Asp Thr Val Leu Ala Tyr Arg Gln Lys Phe Leu Glu Thr Phe Gly Lys Gln Glu Thr Asn Lys Arg Tyr Leu His Tyr Ala Glu Gly Leu Gln Ile Asp Trp Glu Lys Ile Lys Ala

<210> 3225

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3225

 Met Gly Leu Lys Ser His Val Leu Pro Ala Pro Asn Ser Gln Gly Gln

 1
 5
 10
 15

 Gly Ser Leu Cys Ile Phe Val Tyr Val Thr Ser Tyr Met Asp Tyr Ile
 20
 25
 30

 Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly Leu Asn Lys Gln

```
Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp Gly Trp Leu Met
                         55
                                             60
     50
Val Leu Val Gln Gln Leu His Gly Gly Arg Gly His Val Leu Asp Pro
                     70
                                         75
65
Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser Gln Asp Gly Cys
                                     90
Cys lle Pro Lys Asn His Val Cys Val Gln Gly Arg Arg Gly Gly Gly
            100
Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe Tyr Gln Lys Val
                            120
Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro Leu His Ile Phe
                        135
                                            140
Thr
145
<210> 3226
<211> 163
<212> PRT
<213> Homo sapiens
<400> 3226
Met Ala Phe Gly Glu Pro Pro Ser Gly His Ser Thr Arg His Arg Thr
                                                          15
 1
                  5
                                     10
Leu His Gly Leu Ser Phe His Thr Ala Met Gly Met Ala Trp Ser Leu
                                 25
His Tyr Gln Gly Gln Gly Gly Thr Leu Cys Leu Val Gly Val Ser Thr
         35
                             40
                                                  45
Pro Ser His Asp Lys Ala Val Leu Gln Gly Leu Pro His Phe Ser Val
                                              60
                         55
Asn Leu Gly Val Gln Pro Ser Ala Leu Ala Gly Arg Arg Gly Asp Ala
                     70
                                         75
Ser Cys Pro Ser Ser Trp Arg Ser Ala Asp Pro Thr Val Ser Pro Asn
                 85
                                     90
Leu Gly Ala Pro Gly Gly Pro Asn Ala Ile Asp Ala Leu His Gly Glu
```

<210> 3227

<211> 390

<212> PRT

<213> Homo sapiens

<400> 3227

Met Leu Ser Phe Ser Arg Asp Arg Leu Pro Ser Gly Arg Arg Val Ser Gly Lys Cys Pro Pro Pro Pro Leu Gly Met Ala Val Gly Arg Gly Gly Ser Gly Cys Pro Glu Glu Gly Ser Gly Arg Lys Leu Glu Leu Leu Glu Ser Gln Leu Pro Ala Glu Arg Ala Arg Glu Glu Ala Gly Pro Ser Val Arg Arg Pro Arg Asp Lys Leu His Lys Pro Lys Ala Thr Gln Thr Glu Val Lys Pro Ser Val Arg Phe Asn Leu Arg Thr Ser Lys Asp Pro Glu His Glu Gly Cys Tyr Leu Ser Val Gly His Ser Gln Pro Leu Glu Asp Cys Ser Phe Asn Met Thr Ala Lys Thr Phe Phe lle lle His Gly Trp

Thr Met Ser Gly Ile Phe Glu Asn Trp Leu His Lys Leu Val Ser Ala

Leu His Thr Arg Glu Lys Asp Ala Asn Val Val Val Asp Trp Leu

Pro	Leu	Ala	His	Gln	Leu	Tyr	Thr	Asp	Ala	Val	Asn	Asn	Thr	Arg	Val
				165					170					175	
Val	G1y	His	Ser	He	Ala	Arg	Met	Leu	Asp	Trp	Leu	Gln	Glu	Lys	Asp
			180					185					190		
Asp	Phe	Ser	Leu	Gly	Asn	Val	His	Leu	11e	Gly	Tyr	Ser	Leu	Gly	Λla
		195					200					205			
His	Val	Ala	Gly	Tyr	Ala	Gly	Asn	Phe	Val	Lys	Gly	Thr	Val	Gly	Arg
	210					215					220				
Ile	Thr	Gly	Leu	Asp	Pro	Ala	Gly	Pro	Met	Phe	Glu	Gly	Ala	Asp	Ile
225					230					235					240
His	Lys	Arg	Leu	Ser	Pro	Asp	Asp	Λla	Asp	Phe	Val	Asp	Val	Leu	His
				245					250					255	
Thr	Tyr	Thr	Arg	Ser	Phe	Gly	Leu	Ser	lle	Gly	He	Gln	Met	Pro	Val
			260					265					270		
Gly	His	lle	Asp	He	Tyr	Pro	Asn	Gly	G1 y	Asp	Phe	Gln	Pro	Gly	Cys
		275					280					285			
Gly	Leu	Asn	Asp	Val	Leu	Gly	Ser	Ile	Ala	Tyr	Gly	Thr	lle	Thr	Glu
	290					295					300				
Val	Val	Lys	Cys	Glu	His	Glu	Arg	Ala	Val	His	Leu	Phe	Val	Asp	Ser
305					310					315					320
Leu	Val	Asn	Gln	Asp	Lys	Pro	Ser	Phe	Ala	Phe	Gln	Cys	Thr	Asp	Ser
				325					330					335	
Asn	Arg	Phe	Lys	Lys	Gly	lle	Cys	Leu	Ser	Cys	Arg	Lys	Asn	Arg	Cys
			340					345					350		
Asn	Ser	11e	Gly	Tyr	Asn	Ala	Lys	Lys	Met	Arg	Asn	Lys	Arg	Asn	Ser
		355					360					365			
Lys	Met	Tyr	Leu	Lys	Thr	Arg	Ala	Gly	Met	Pro	Phe	Arg	Gly	Asn	Leu
	370					375					380				
Gln	Ser	Leu	Glu	Cys	Pro										
385					390										

〈210〉 3228

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3228
Met Val Ser Cys Leu Val Glu Gly Leu Lys Lys Ala Ala Tyr Lys Val
1
5
10
15
Val Asn Tyr Asp Lys Pro Lys Glu Ala Thr Gln Gly Lys Asp Glu Asn
20
25
30
Pro Ala Gln Phe Met Ala Arg Leu Val Ala Thr Leu Arg Arg Phe Thr
35
40
45
Ala Leu Asp Pro Glu Gly Pro Glu Gly Cys Leu Ile Leu Asn Met His
50
55
60

Phe Ile Ile Gln Ser Ala Pro Asp Ile Arg Lys Lys Phe Gln Lys Leu
65 70 75 80

Asp Ser Ser Pro Gln Thr Pro Gln Gln Asp Leu 11e Asn Leu Ala Phe 85 90 95

Lys Val Phe Asn Asn Arg Glu Glu Thr Ala Lys 100 105

<210> 3229

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3229

Met Ser Arg Glu Phe Arg Gly His Arg Asn Cys Val Leu Thr Leu Ala 1 5 10 15

Tyr Ser Ala Pro Trp Asp Leu Pro Ser Thr Pro Cys Ala Glu Glu Ala 20 25 30

Ala Ala Gly Gly Leu Leu Val Thr Gly Ser Thr Asp Gly Thr Ala Lys
35 40 45

Val Trp Gln Val Ala Ser Gly Cys Cys His Gln Thr Leu Arg Gly His
50 55 60

Thr Gly Ala Val Leu Cys Leu Val Leu Asp Thr Pro Gly His Thr Ala
65 70 75 80

Phe Thr Gly Ser Thr Asp Ala Thr Ile Arg Ala Trp Asp Ile Leu Ser 85 90 95

```
Gly Glu Gln Leu Arg Val Phe Arg Glu His Arg Gly Ser Val 11e Cys
            100
                                105
                                                     110
Leu Glu Cys Ser Arg Ala Ala Gly Thr Leu Ala Pro Gly Pro Ser Thr
        115
                            120
                                                 125
Arg Ser Leu Glu Ser Cys Gly Gly Cys Ser Gly Ala Thr His Ser Ser
                        135
                                             140
Ser Thr Ala Ser Arg Cys Thr Ala Arg Cys Ser Thr Pro Pro Arg Thr
145
                    150
                                        155
                                                             160
Thr Ala Pro Cys Ala Ser Gly Thr Cys Ala Gly Ser Glu Val Pro Arg
                165
                                     170
Gly Pro Leu Arg Pro Arg Ala Ala Ser Arg Gly Ser Ser Ala Thr Arg
                                185
Trp Ala Ala Pro Pro Arg Pro Cys Ser Arg Pro Asp Pro Ala Gly Pro
                            200
                                                 205
Leu Gln Thr Pro Ala Gln Thr Pro Ser Gly Ser Gln Ser Ala Pro Pro
                        215
Cys Tyr Pro Arg Trp Trp Arg Pro Met Ala Gly Glu Gly Arg Gly Ala
225
                    230
                                        235
                                                             240
Arg Lys Pro Gly Arg Glu Glu Ser Pro Ser Gln Ala Ser Gly Phe Ser
                245
                                    250
Leu Val Ala Arg Arg Arg Trp Glu Arg Glu Cys Ser Pro Trp Gly Pro
            260
                                                     270
                                265
Pro Pro Phe Pro Phe
        275
```

<210> 3230

<211> 586

<212> PRT

<213> Homo sapiens

<400≻ 3230

Met Lys Tyr IIe Leu Val Thr Gly Gly Val IIe Ser Gly IIe Gly Lys

1 5 10 15

Gly IIe IIe Ala Ser Ser IIe Gly Thr IIe Leu Lys Ser Cys Gly Leu

			20					25					30		
Arg	Val	Thr	Ala	lle	Lys	He	Asp	Pro	Tyr	He	Asn	He	Asp	Ala	Gly
		35					40					45			
Thr	Phe	Ser	Pro	Tyr	Glu	His	Gly	Glu	Val	Phe	Val	Leu	۸sn	Asp	Gly
	50	•				55					60				
Gly	Glu	Val	Asp	Leu	Asp	Leu	Gly	Asn	Tyr	Glu	Arg	Phe	Leu	Asp	He
65					70					75					80
Asn	Leu	Tyr	Lys	Asp	Asn	Asn	Ile	Thr	Thr	Gly	Lys	lle	Tyr	Gln	His
				85					90					95	
Val	He	Asn	Lys	Glu	Arg	Arg	Gly	Asp	Tyr	Leu	Gly	Lys	Thr	Val	Gln
			100					105					110		
Val	Va]	Pro	His	He	Thr	Asp	Ala	Val	Gln	Glu	Trp	Va]	Met	Asn	Gln
		115					120					125			
Ala		Val	Pro	Val	Asp		Asn	Lys	Glu	Glu	Pro	Gln	He	Cys	Val
	130					135					140				
	G]u	Leu	Gly	Gly		He	Gly	Asp	lle		Gly	Met	Pro	Phe	
145					150					155					160
Glu	Ala	Phe	Arg		Phe	GIn	Phe	Lys		Lys	Arg	Glu	Asn		Cys
Δ	11.	11.	V 3	165		17 1		6.1	170	c		(D)	0.1	175	0.1
Asn	11e	His		Ser	Leu	val	Pro		Leu	Ser	Ala	Ihr		Glu	GIn
Luc	Than	Luc	180 Dno	Tha	C1.5	A a.s.	Con	185 Val	A	A 1 -	1	Λ	190	1	C1
LyS	1111	Lys 195	Pro	Inr	GIN	ASI		vai	Arg	Ala	Leu		61y	Leu	GIY
Lau	Sor	Pro	Acn	Lou	110	Va 1	200 Cvc	Ara	Sor	Sor	The	205 Pro	110	Clu	Mot
LCu	210	110	лэр	Leu	110	215	Cys	MI g	361	361	220	110	116	UIU	мес
Ala		Lys	Glu	lvs	lle		Met	Phe	Cvs	Hie		Asn	Pro	Glu	Gln
225		2,2		.5,0	230	001			0,0	235	, 01	71511	110	Olu	240
	Ile	Cys	11e	His		Val	Ser	Ser	Thr		Arg	Val	Pro	Val	
		•		245					250	- , -	6			255	204
Leu	Glu	Glu	Gln	Ser	lle	Val	Lys	Tyr	Phe	Lys	Glu	Arg	Leu		Leu
			260					265					270		
Pro	lle	Gly	Asp	Ser	Ala	Ser	Asn	Leu	Leu	Phe	Lys	Trp	Arg	Asn	Met
		275					280					285			
Ala	Asp	Arg	Tyr	Glu	Arg	Leu	Gln	Lys	He	Cys	Ser	He	Ala	Leu	Va]
	290					295					300				

Gly	Lys	Tyr	Thr	Lys	Leu	Arg	Asp	Cys	Tyr	Ala	Ser	Val	Phe	Lys	Ala
305					310					315					320
Leu	Glu	His	Ser	Ala 325	Leu	Ala	He	Asn	His 330	Lys	Leu	Asn	Leu	Met 335	Tyr
Ile	Asp	Ser	11e 340	Asp	Leu	Glu	Lys	11e 345	Thr	Glu	Thr	Glu	Asp 350	Pro	Val
Lys	Phe	His 355	Glu	Λla	Trp	Gln	Lys 360	Leu	Cys	Lys	Ala	Лsр 365	Gly	lle	Leu
Val	Pro 370	Gly	Gly	Phe	Gly	11e 375	Arg	Gly	Thr	Leu	Gly 380	Lys	Leu	Gln	Ala
I1e 385	Ser	Trp	Ala	Arg	Thr 390	Lys	Lys	Ile	Pro	Phe 395	Leu	Gly	Val	Cys	Leu 400
G1y	Met	Gln	Leu	Ala 405	Va]	lle	Glu	Phe	Ala 410	Arg	Asn	Cys	Leu	Asn 415	Leu
Lys	Asp	Ala	Asp 420	Ser	Thr	Glu	Phe	Arg 425	Pro	Asn	Ala	Pro	Val 430	Pro	Leu
Val	Ile	Asp 435	Met	Pro	Glu	His	Asn 440	Pro	Gly	Asn	Leu	Gly 445	Gly	Thr	Met
Arg	Leu 450	Gly	lle	Arg	Arg	Thr 455	Val	Phe	Lys	Thr	G1u 460	Asn	Ser	lle	Leu
Arg 465	Lys	Leu	Tyr	Gly	Asp 470	Val	Pro	Phe	lle	Glu 475	Glu	Λrg	His	Arg	His 480
Arg	Phe	Glu	Val	Asn 485	Pro	Asn	Leu	lle	Lys 490	Gln	Phe	Glu	Gln	Asn 495	Asp
Leu	Ser	Phe	Val 500	Gly	Gln	Asp	Val	Asp 505	Gly	Asp	Arg	Met	Glu 510	lle	lle
Glu	Leu	Ala 515	Asn	His	Pro	Tyr	Phe 520	Val	Gly	Val	G1n	Phe 525	His	Pro	Glu
Phe	Ser 530	Ser	Arg	Pro	Met	Lys 535	Pro	Ser	Pro	Pro	Tyr 540	Leu	Gly	Leu	Leu
Leu 545	Ala	Ala	Thr	Gly	Asn 550	Leu	Asn	Ala	Tyr	Leu 555	Gln	Gln	Gly	Cys	Lys 560
Leu	Ser	Ser	Ser	Аsp 565	Arg	Tyr	Ser	Asp	Ala 570	Ser	Asp	Asp	Ser	Phe 575	Ser
Glu	Pro	Arg	11e 580	Λla	Glu	Leu	Glu	11e 585	Ser						

<210> 3231 <211> 140 <212> PRT <213> Homo sapiens <400> 3231 Met Asn Ile Ile Thr Ser Pro Leu Pro Gly Ser Pro Asn Ser Leu Arg 1 10 Gly Ser Thr Phe Met Leu Gly Ser Ser Leu Glu Ala Ser Leu Gly Lys 25 Leu Gln Ser Gln Pro Ser Thr Ser Thr Cys Ser Pro Ser Pro Val Lys 35 40 45 Val Asn Lys Val Arg Val Ser Leu Glu Ala Arg Arg Leu Arg Val Gly 55 Val Glu Arg Ser His Ser Gln Ser Cys Leu Val Tyr Leu Ser Val Met 65 70 75 80 Lys Lys Arg Glu Glu Thr Asn Lys Met Glu Arg Val Glu Ala Arg Pro 85 90 Ser Thr Cys Phe Leu Gly Glu Leu Gly His Ser Gly Gln His Arg Arg 105 Val Pro Gly Leu Lys Lys Ile Asp His Gln Gln Gly Gln Gly Val Val

120

Thr Glu Lys Gly Ala Thr Pro Trp Val Asn Lys Gln

135

125

140

<210> 3232

130

<211> 114

<212> PRT

<213> Homo sapiens

115

<400> 3232

Met Phe Phe 11e Phe Gln Lys Glu Lys Ala Leu Lys 11e Phe Leu Lys
1 5 10 15

Cys Asp Cys His Leu Phe Ser Thr Lys Asn Phe Leu Arg Phe Phe Lys Arg Lys Ile Glu Ile Leu Ser Leu Pro Arg Phe Pro Ser Pro Pro Val Phe Lys Met Lys Ala Gln Val Gln Glu Trp Gly Ala Gln Val Pro Gly Val Tyr Thr Pro Pro Thr Gln Leu Arg Pro Ala Leu Ala Glu Gly Asp Ala Val Leu Ser Ser Gln Pro Arg Glu Ala Ser Phe Ser Thr Ser Asn Pro Thr Ala Met Asn Val Asn Ser Leu Gly Cys Phe Gln Lys Gln Glu Ser Ala <210> 3233 <211> 454 <212> PRT <213> Homo sapiens <400> 3233 Met Glu 11e His His Phe Leu Leu Lys Lys Arg Lys Gln Ala Asn Leu Ala Gln Leu Leu Arg Asp Ser Gln Asp Arg Asn Lys His Leu Gly Glu Glu 11e Lys Glu Leu Gln Gln Arg Leu Gly Glu Val Gln Gly Asp Asn Lys Leu Leu Arg Met Thr Ile Ala Lys Gln Arg Leu Gly Asp Glu Ala lle Gly Val Arg His Phe Ala Ala His Glu Arg Glu Asp Leu Val Gln Gln Leu Glu Arg Ala Lys Glu Gln lle Glu Ser Leu Glu His Asp Leu

Gln Ala Ser Val Asp Glu Leu Gln Asp Val Lys Glu Glu Arg Ser Ser

Tyr	Gln	Asp	Lys	Val	G]u	Arg	Leu	Asn	Gln	Glu	Leu	Asn	His	He	Leu
•		115					120					125			
Ser	Gly	His	Glu	Asn	Arg	He	He	Asp	Val	Asp	Ala	Leu	Cys	Met	Glu
	130					135					140				
Asn	Arg	Tyr	Leu	Gln	Glu	Arg	Leu	Lys	Gln	Leu	His	Glu	Glu	Val	Asn
145					150					155					160
Leu	Leu	Lys	Ser	Asn	lle	Ala	Lys	Tyr	Lys	Asn	Ala	Leu	Glu	Arg	Arg
				165					170					175	
Lys	Asn	Ser	Lys	Gly	Gln	Gly	Lys	Ser	Ser	Ser	Ser	Ala	Leu	Thr	Gly
			180					185					190		
Val	Leu		Ala	Lys	G1n	Val		Asp	Leu	Leu	Ser		Asp	His	Gly
		195					200					205			
Cys		Leu	Pro	Ala	Thr		G1n	Ser	He	Ser		Leu	Lys	Ser	Leu
	210					215					220				0.7
	Thr	Ala	Leu	Leu	Glu	Thr	He	His	Glu		Asn	Met	Val	He	
225	61		61	T)	230		7.1	,	61	235		V. I	4.1	C1	240
His	GIn	Arg	GIn		Asn	Lys	He	Leu		Asn	Arg	Val	Ala		Leu
C1	1	1	1	245	Tl		C1	17.1	250	C1	1	т	C	255	D
GIU	Lys	Lys		Arg	Thr	Leu	GIU		Ser	61 y	Leu	ırp		Leu	Pro
C1	C1	1	260	The	11.	Lau	Dho	265	Aan	Davo	Tha	Lou	270 Pro	S 0.11	C1
Gly	Gry	275	ASP	1111	He	Leu	280	Sei	nsp	110	1111	285	110	261	Gry
Gln	Ara		Ara	Sor	Pro	Lou		Luc	Pho	Val	Glu		Pro	Thr	Glu
Oin	290	361	ni g	261	110	295	Leu	rys	THE	vai	300	0111	110	1111	Glu
Asn		Ala	Asn	Pro	Lys		Glv	Glu	Ala	Gln		Gln	Glu	Glu	Asn
305	Ly 5		.10p	110	310	тор	01)	Ola	,,,,	315.	Lys	OIII	014	014	320
	Ser	Cvs	Ala	Ala	Ala	Glu	Ala	Leu	Thr		Pro	Glu	Asp	Ala	
		0,0		325				130.0	330					335	,
Arg	Pro	Ala	Va]		Ser	Pro	Ala	Asn		Ser	Arg	Gly	Asn		Cvs
Ü			340					345			Ü	·	350		•
Lys	Leu	Phe	His	Pro	Ser	Leu	Pro	Gln	Leu	Pro	Ser	Glu	Glu	Glu	Val
		355					360					365			
Asn	Ser	Leu	Gly	Arg	Glu	Пе	He	Lys	Leu	Thr	Lys	Glu	Gln	Ala	Ala
	370					375					380				
Ala	Glu	Leu	Glu	Glu	Va]	Arg	Arg	Glu	Ser	Pro	lle	Glu	Gly	Gln	Arg
385					390					395					400

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Ser Glu Thr Gly Pro Ala Pro Pro Gly Leu Ala Ile Gln Gly Glu Leu
                                    410
Pro Lys Ser His Leu Asp Ser Phe Glu Ala Ser Arg Pro Ala Ala Lys
            420
                                                    430
Ala Ser Thr Pro Glu Asp Gly Lys Gly 11e Pro Glu Gly Gly Met
        435
                            440
                                                445
Arg Ser Thr Val Lys Thr
    450
<210> 3234
<211> 278
<212> PRT
<213> Homo sapiens
<400> 3234
Met Thr Asp Leu Asn Lys His 11e Lys Gln Ala Gln Thr Gln Arg Lys
 1
                  5
                                     10
Gln Leu Leu Glu Glu Ser Arg Glu Leu His Arg Glu Lys Leu Leu Val
                                 25
Gln Ala Glu Asn Arg Phe Phe Leu Glu Tyr Leu Thr Asn Lys Thr Glu
                            40
                                                 45
Glu Tyr Thr Glu Gln Pro Glu Lys Val Trp Asn Ser Tyr Leu Gln Lys
   . 50
                         55
Ser Gly Glu Ile Glu Arg Arg Gln Glu Ser Ala Ser Arg Tyr Ala
                     70
Glu Gln Ile Ser Val Leu Lys Thr Ala Leu Leu Gln Lys Glu Asn Ile
                                     90
                 85
Gln Ser Ser Leu Lys Arg Lys Leu Gln Ala Met Arg Asp Ile Ala Ile
            100
                                105
Leu Lys Glu Lys Glu Glu Lys Glu lle Gln Thr Leu Gln Glu Glu Thr
                            120
Lys Lys Val Gln Ala Glu Thr Ala Ser Lys Thr Arg Glu Val Gln Ala
    130
                        135
                                            140
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Gln Leu Leu Gln Glu Lys Arg Leu Leu Glu Lys Gln Leu Ser Glu Pro

155

160

150

Asp Arg Arg Leu Leu Gly Lys Arg Lys Arg Glu Leu Asn Met Lys 165 170 Ala Gln Ala Leu Lys Leu Ala Ala Lys Arg Phe lle Phe Glu Tyr Ser 180 185 190 Cys Gly 11e Asn Arg Glu Asn Gln Gln Phe Lys Lys Glu Leu Leu Gln 200 205 Leu Ile Glu Gln Ala Gln Lys Leu Thr Ala Thr Gln Ser His Leu Glu 210 215 220 Asn Arg Lys Gln Gln Leu Gln Gln Glu Gln Trp Tyr Leu Glu Ser Leu 230 235 240 Ile Gln Ala Arg Gln Arg Leu Gln Gly Ser His Asn Gln Cys Leu Asn 245 250 Arg Gln Asp Val Pro Lys Thr Thr Pro Ser Leu Pro Gln Gly Thr Lys 260 265 270 Ser Arg Ile Asn Pro Lys 275

<210> 3235

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3235

Met Arg His Arg Ala Gln Gln Thr Gln Lys Phe Lys Ala Ala Tyr Ala 1 5 10 15

Tyr Asn Leu Met Gly Ser Leu Ser His Glu Phe Arg Tyr Ser Phe Val 20 25 30

Arg Val Leu Trp Phe Arg lle Ser His Lys Ala Val lle Lys Leu Leu 35 40 45

Ala Arg Thr Gly Val Ser Ser Glu Val Gln Met Glu Glu Asp Ser Leu 50 55 60

Leu Gln Arg Thr Asp Gly Gly Thr Gln Phe Leu Glu Val Gly Gln Thr 65 70 75 80

Ala Ala Ala Leu Cys Ser Leu Pro Cys Gly Pro Leu Arg Tyr Asp His
85 90 95

Leu Leu Cys Glu Ser Val Gln Ser Ser Arg Ala Thr Glu Arg Ala Cys 100 105 110

<210> 3236

<211> 655

<212> PRT

<213> Homo sapiens

<400> 3236

Tle Ser Leu Val Glu Glu Glu Asp Gln His Met Lys Leu Ser Leu Gly
35 40 45

Gly Ser Glu Met Gly Leu Ser Ser His Leu Gln Ser Ser Lys Ala Gly
50 55 60

Pro Thr Arg Ile Phe Thr Ser Asn Thr His Ser Ser Val Val Leu Gln 65 70 75 80

Gly Phe Asp Gln Leu Arg Leu Glu Gly Leu Leu Cys Asp Val Thr Leu 85 90 95

Met Pro Gly Asp Thr Asp Asp Ala Phe Pro Val His Arg Val Met Met 100 105 110

Ala Ser Ala Ser Asp Tyr Phe Lys Ala Met Phe Thr Gly Gly Met Lys
115 120 125

Glu Gln Asp Leu Met Cys 11e Lys Leu His Gly Val Ser Lys Val Gly 130 135 140

Leu Arg Lys Ile Ile Asp Phe Ile Tyr Thr Ala Lys Leu Ser Leu Asn 145 150 155 160

Met Asp Asn Leu Gln Asp Thr Leu Glu Ala Ala Ser Phe Leu Gln]]e
165 170 175

Leu Pro Val Leu Asp Phe Cys Lys Val Phe Leu Ile Ser Gly Val Thr 180 185 190

Leu Asp Asn Cys Val Glu Val Gly Arg lle Ala Asn Thr Tyr Asn Leu 195 200 205

Thr	Glu	Val	Asp	Lys	Tyr	Val	Asn	Ser	Phe	Val	Leu	Lys	Asn	Phe	Pro
	210					215					220				
Ala	Leu	Leu	Ser	Thr	Gly	Glu	Phe	Leu	Lys	Leu	Pro	Phe	Glu	Arg	Leu
225					230					235					240
Ala	Phe	Val	Leu	Ser	Ser	Asn	Ser	Leu	Lys	His	Cys	Thr	Glu	Leu	G1u
				245					250					255	
Leu	Phe	Lys	Ala	Thr	Cys	Arg	Trp	Leu	Arg	Leu	Glu	Glu	Pro	Arg	Met
			260					265					270	·	
Asp	Phe	Ala	Ala	Lys	Leu	Met	Lys	Asn	He	Arg	Phe	Pro	Leu	Met	Thr
		275					280					285			
Pro	Gln	Glu	Leu	Ile	Asn	Tyr	Val	Gln	Thr	Val	Asp	Phe	Met	Arg	Thr
	290					295					300				
Asp	Asn	Thr	Cys	Val	Asn	Leu	Leu	Leu	G] u	Ala	Ser	Asn	Tyr	Gln	Met
305					310					315					320
Met	Pro	Tyr	Met	Gln	Pro	Val	Met	Gln	Ser	Asp	Arg	Thr	Ala	He	Arg
				325					330					335	
Ser	Asp	Thr	Thr	His	Leu	Val	Thr	Leu	Gly	Gly	Val	Leu	Arg	Gln	Arg
			340					345					350		
Leu	Val	Val	Ser	Lys	Glu	Leu	Arg	Met	Tyr	Asp	Glu	Lys	Ala	His	Glu
		355					360					365			
Trp	Lys	Ser	Leu	Ala	Pro	Met	Asp	Ala	Pro	Arg	Tyr	Gln	His	Gly	He
	370					375					380				
Ala	Val	lle	Gly	Asn		Leu	Tyr	Val	Val	Gly	Gly	Gln	Ser	Asn	Tyr
385					390					395					400
Asp	Thr	Lys	Gly	Lys	Thr	Ala	Val	Asp	Thr	Val	Phe	Arg	Phe	Asp	Pro
				405					410					415	
Arg	Tyr	Asn	Lys	Trp	Met	Gln	Val		Ser	Leu	Asn	Glu		Arg	Thr
			420					425					430		
Phe	Phe		Leu	Ser	Ala	Leu		G] y	Tyr	Leu	Tyr		Val	Gly	Gly
		435					440					445			
Arg		Ala	Ala	Gly	Glu		Pro	Thr	Va]	Glu		Tyr	Asn	Pro	Arg
	450					455					460				
	Asn	Glu	Trp	Thr		Val	Ala	Lys	Met	Ser	Glu	Pro	His	Tyr	
465					470					475			<i>(</i> 1.7)	0.1	480
His	Ala	Gly	Thr		Tyr	G1 y	Gly	Val		Tyr	He	Ser	Gly		He
				485					490					495	

Thr His Asp Thr Phe Gln Lys Glu Leu Met Cys Phe Asp Pro Asp Thr Asp Lys Trp Ile Gln Lys Ala Pro Met Thr Thr Val Arg Gly Leu His Cys Met Cys Thr Val Gly Glu Arg Leu Tyr Val Ile Gly Gly Asn His Phe Arg Gly Thr Ser Asp Tyr Asp Asp Val Leu Ser Cys Glu Tyr Tyr Ser Pro Ile Leu Asp Gln Trp Thr Pro Ile Ala Ala Met Leu Arg Gly Gln Ser Asp Val Gly Val Ala Val Phe Glu Asn Lys Ile Tyr Val Val Gly Gly Tyr Ser Trp Asn Asn Arg Cys Met Val Glu lle Val Gln Lys Tvr Asp Pro Asp Lys Asp Glu Trp His Lys Val Phe Asp Leu Pro Glu Ser Leu Gly Gly Ile Arg Ala Cys Thr Leu Thr Val Phe Pro Pro Glu Glu Thr Thr Pro Ser Pro Ser Arg Glu Ser Pro Leu Ser Ala Pro

<210> 3237

<211> 608

<212> PRT

<213> Homo sapiens

<400> 3237

 Met
 Leu
 Leu
 Glu
 Thr
 Gly
 Met
 Lys
 Glu
 Gly
 Leu
 Phe
 Arg
 1leu

 I
 5
 5
 6
 10
 10
 10
 10
 15
 15

 Gly
 Ala
 Gly
 Ala
 Ser
 Lys
 Leu
 Lys
 Leu
 Lys
 Ala
 Ala
 Leu
 Asp
 Cys

 Ser
 Thr
 Ser
 His
 Leu
 Asp
 Glu
 Phe
 Tyr
 Ser
 Asp
 Pro
 His
 Ala
 Val
 Ala

 Gly
 Ala
 Leu
 Lys
 Ser
 Tyr
 Leu
 Arg
 Glu
 Leu
 Pro
 Glu
 Pro
 Leu
 Met
 Thr

Phe 65	Asn	Leu	Tyr	Glu	G1u 70	Trp	Thr	Gln	Val	Ala 75	Ser	Val	Gln	Asp	G1n 80
	lve	Lve	Lau	Gln		Leu	Trn	Arg	Thr		Gln	lve	Lau	Pro	
пар	Lys	Lys	r,cu	85	лэр	Lea	пр	ni g	90	Cys	OIII	1. 3 3	Leu	95	110
Gln	Asn	Phe	Val	Asn	Phe	Arg	Tyr	Leu	lle	Lys	Phe	Leu	Ala	Lys	Leu
			100					105					110		
Ala	Gln	Thr	Ser	Asp	Val	Asn	Lys	Met	Thr	Pro	Ser	Asn	lle	Ala	11e
		115					120					125			
Val	Leu	Gly	Pro	Asn	Leu	Leu	Trp	Ala	Arg	Asn	Glu	Gly	Thr	Leu	Ala
	130					135					140				
Glu	Met	Ala	Ala	Ala	Thr	Ser	Val	His	Val	Val	Ala	Val	He	Glu	Pro
145					150					155					160
He	He	Gln	His	Ala	Asp	Trp	Phe	Phe	Pro	Glu	Glu	Val	Glu	Phe	Asn
				165					170					175	
Val	Ser	Glu	Ala	Phe	Val	Pro	Leu	Thr	Thr	Pro	Ser	Ser	Asn	His	Ser
			180					185					190		
Phe	His	Thr	G1y	Asn	Лsp	Ser	Asp	Ser	Gly	Thr	Leu	Glu	Arg	Lys	Arg
		195					200					205			
Pro	Ala	Ser	Met	Ala	Val	Met	Glu	Gly	Asp	Leu	Val	Lys	Lys	Glu	Ser
	210					215					220				
Phe	Gly	Val	Lys	Leu	Met	Asp	Phe	Gln	Ala	His	Arg	Arg	Gly	Gly	Thr
225					230					235					240
Leu	Λsn	Arg	Lys	His	Пe	Ser	Pro	Ala	Phe	Gln	Pro	Pro	Leu	Pro	Pro
				245					250					255	
Thr	Asp	Gly	Ser	Thr	Va]	Val	Pro	Ala	Gly	Pro	Glu	Pro	Pro	Pro	GIn
			260					265					270		
Ser	Ser	Arg	Ala	Glu	Ser	Ser	Ser	Gly	G1 y	Gly	Thr	Val	Pro	Ser	Ser
		275					280					285			
Ala	G1 y	He	Leu	Glu	Gln	Gly	Pro	Ser	Pro	Gly	Asp	Gly	Cys	Pro	Pro
	290					295					300				
Lys	Pro	Lys	Asp	Pro	Val	Ser	Ala	Ala	Val	Pro	Ala	Pro	Gly	Arg	Asn
305					310					315					320
Asn	Ser	G]n	IJe	Ala	Ser	Gly	Gln	Asn	Gln	Pro	Gln	Ala	Ala	Ala	Gly
				325					330					335	
Ser	His	G1n	Leu	Ser	Met	Gly	G]n	Pro	His	Asn	Ala	Ala	Gly	Pro	Ser
			340					345					350		

Pro	His	Thr	Leu	Arg	Arg	Ala	Val	Lys	Lys	Pro	Ala	Pro	Ala	Pro	Pro
		355					360					365			
Lys	Pro	Gly	Asn	Pro	Pro	Pro	Gly	His	Pro	G1 y	Gly	Gln	Ser	Ser	Ser
	370					375					380				
Gly	Thr	Ser	Gln	His	Pro	Pro	Ser	Leu	Ser	Pro	Lys	Pro	Pro	Thr	Arg
385					390					395					400
Ser	Pro	Ser	Pro	Pro	Thr	Gln	His	Thr	G1 y	Gln	Pro	Pro	Gly	Gln	Pro
				405					410					415	
Ser	Ala	Pro	Ser	Gln	Leu	Ser	Ala	Pro	Arg	Arg	Tyr	Ser	Ser	Ser	Leu
			420					425					430		
Ser	Pro	He	Gln	Ala	Pro	Asn	His	Pro	Pro	Pro	Gln	Pro	Pro	Thr	Gln
		435					440					445			
Ala	Thr	Pro	Leu	Met	His	Thr	Lys	Pro	Asn	Ser	Gln	Gly	Pro	Pro	Asn
	450					455					460				
Pro	Met	Ala	Leu	Pro	Ser	Glu	His	Gly	Leu	Glu	Gln	Pro	Ser	His	Thr
465					470					475					480
Pro	Pro	Gln	Thr	Pro	Thr	Pro	Pro	Ser	Thr	Pro	Pro	Leu	Gly	Lys	Gln
				485					490					495	
Asn	Pro	Ser	Leu	Pro	Ala	Pro	Gln	Thr	Leu	Ala	Gly	G1 y	Asn	Pro	Glu
			500					505					510		
Thr	Ala		Pro	His	Ala	Gly	Thr	Leu	Pro	Arg	Pro	Arg	Pro	Val	Pro
		515					520					525			
Lys		Arg	Asn	Arg	Pro		Val	Pro	Pro	Pro		Gln	Pro	Pro	Gly
	530					535					540				
	His	Ser	Ala	Gly	Asp	Ser	Ser	Leu	Thr		Thr	A]a	Pro	Thr	
545	_				550					555					560
Ser	Lys	He	Val		Asp	Ser	Asn	Ser		Val	Ser	Glu	Pro		Arg
_			_	565					570					575	
Ser	He	Phe		Glu	Met	His	Ser		Ser	Ala	Ser	Lys		Val	Pro
			580					585					590		
Gly	Arg		Leu	Leu	Asp	He		Asn	Asp	Thr	Glu		Thr	Ala	Leu
		595					600					605			

<211> 510

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<212> PRT
<213> Homo sapiens
<400> 3238
Met Val Ala Arg Val Gly Leu Leu Leu Arg Ala Leu Gln Leu Leu Leu
                                     10
Trp Gly His Leu Asp Ala Gln Pro Ala Glu Arg Gly Gly Gln Glu Leu
             20
                                 25
                                                      30
Arg Lys Glu Ala Glu Ala Phe Leu Glu Lys Tyr Gly Tyr Leu Asn Glu
                             40
Gln Val Pro Lys Ala Pro Thr Ser Thr Arg Phe Ser Asp Ala Ile Arg
                         55
Ala Phe Gln Trp Val Ser Gln Leu Pro Val Ser Gly Val Leu Asp Arg
                     70
                                          75
                                                              80
Ala Thr Leu Arg Gln Met Thr Arg Pro Arg Cys Gly Val Thr Asp Thr
                                      90
                 85
Asn Ser Tyr Ala Ala Trp Ala Glu Arg Ile Ser Asp Leu Phe Ala Arg
            100
                                 105
                                                     110
His Arg Thr Lys Met Arg Arg Lys Lys Arg Phe Ala Lys Gln Gly Asn
                                                 125
                            120
Lys Trp Tyr Lys Gln His Leu Ser Tyr Arg Leu Val Asn Trp Pro Glu
                        135
His Leu Pro Glu Pro Ala Val Arg Gly Ala Val Arg Ala Ala Phe Gln
145
                    150
                                         155
                                                             160
Leu Trp Ser Asn Val Ser Ala Leu Glu Phe Trp Glu Ala Pro Ala Thr
                165
                                     170
Gly Pro Ala Asp 11e Arg Leu Thr Phe Phe Gln Gly Asp His Asn Asp
            180
                                 185
                                                     190
Gly Leu Gly Asn Ala Phe Asp Gly Pro Gly Gly Ala Leu Ala His Ala
                            200
                                                 205
Phe Leu Pro Arg Arg Gly Glu Ala His Phe Asp Gln Asp Glu Arg Trp
                        215
                                             220
Ser Leu Ser Arg Arg Arg Gly Arg Asn Leu Phe Val Val Leu Ala His
225
                    230
                                         235
                                                             240
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Glu lle Gly His Thr Leu Gly Leu Thr His Ser Pro Ala Pro Arg Ala

Leu	Met	Ala	Pro	Tyr	Tyr	Lys	Arg	Leu	Gly	Arg	Asp	Ala	Leu	Leu	Ser
			260					265					270		
Trp	Asp	Asp	Val	Leu	Ala	Val	Gln	Ser	Leu	Tyr	G1 y	Lys	Pro	Leu	Gly
		275					280					285			
Gly	Ser	Val	Ala	Val	Gln	Leu	Pro	Gly	Lys	Leu	Phe	Thr	Asp	Phe	Glu
	290					295					300				
Thr	Trp	Asp	Ser	Tyr	Ser	Pro	Gln	Gly	Arg	Arg	Pro	Glu	Thr	G1n	Gly
305					310					315					320
Pro	Lys	Tyr	Cys	His	Ser	Ser	Phe	Asp	Ala	He	Thr	Val	Gly	Ser	His
				325					330					335	
Phe	Trp	Glu	Va]	Ala	Ala	Asp	Gly	Asn	Val	Ser	Glu	Pro	Arg	Pro	Leu
			340					345					350		
G1n	Glu		Trp	Va]	Gly	Leu	Pro	Pro	Asn	Пе	Glu		Ala	Ala	Val
		355					360					365			
Ser	Leu	Asn	Asp	Gly	Asp	Phe	Tyr	Phe	Phe	Lys	Gly	6] y	Arg	Cys	Trp
	370					375					380				
	Phe	Arg	Gly	Pro		Pro	Val	Trp	Gly		Pro	Gln	Leu	Cys	
385			_	_	390		_			395					400
A]a	Gly	Gly	Leu		Arg	His	Pro	Asp		Ala	Leu	Phe	Phe	Pro	Pro
				405					410		_	_		415	
Leu	Arg	Arg		He	Leu	Phe	Lys		Ala	Arg	Tyr	Tyr		Leu	Ala
	0.1	0.1	420	0.1				425					430	0.1	
Arg	Gly		Leu	GIn	Val	Glu		lyr	Tyr	Pro	Arg		Leu	Gln	Asp
Œ.	6.1	435		Б	0.1	0.1	440	C	6.1			445		D	
Lrp		Gly	He	Pro	61u		val	ser	61 y	Ala		Pro	Arg	Pro	Asp
CI	450	11.	т 1	DI	Dt.	455	Δ		۸.	т	460 T		,		C1
	ser	11e	11e	Pne		Arg	Asp	Asp	Arg		rp	Arg	Leu	Asp	
465	1	1	C1	Α1	470	Tl	C	C1	۸	475	11-	TL	C1	1	480 D
ATA	LYS	ı.eu	om		ınr	ınr	ser	01 À		ırp	ATA	ınr	GIU	Leu 405	rro
Т	Mat	C1	Cva	485	u: ~	A 1 -	Λ	Ca.	490	Ç	A 3 -	ينم ا	Dl	495	
11.b	Met	оту		rrp	His	кта	ASII		GTY	Se1,	MIA	ren			
			500					505					510		

<211> 248

<212> PRT <213> Homo sapiens <400> 3239 Met Pro Arg Ile Ala Gly Asn His Leu Met Leu Glu Glu Ser Arg Thr Cys Ser Ser Pro Glu Leu Leu Asp Gly Val Trp Pro Cys Gln Pro Leu His Phe Gly Leu Pro Ala Ser Glu Met His Phe Gln Thr Met Leu Lys Ser Lys Leu Asn Val Leu Thr Leu Lys Lys Glu Pro Leu Pro Ala Val lle Phe His Glu Pro Glu Ala lle Glu Leu Cys Thr Thr Thr Pro Leu Met Lys Thr Arg Thr His Ser Gly Cys Lys Val Thr Tyr Leu Gly Lys Val Ser Thr Thr Gly Met Gln Phe Leu Ser Gly Cys Thr Glu Lys Pro Val Ile Glu Leu Trp Lys Lys His Thr Leu Ala Arg Glu Asp Val Phe Pro Ala Asn Ala Leu Leu Glu lle Arg Pro Phe Gln Val Trp Leu His His Leu Asp His Lys Gly Glu Ala Thr Val His Met Asp Thr Phe Gln Val Ala Arg Ile Ala Tyr Cys Thr Ala Asp His Asn Val Ser Pro Asn lle Phe Ala Trp Val Tyr Arg Glu lle Asn Asp Asp Leu Ser Tyr Gln Met Asp Cys His Ala Val Glu Cys Glu Ser Lys Leu Glu Ala Lys Lys Leu Ala His Ala Met Met Glu Ala Phe Arg Lys Thr Phe His Ser Met Lys Ser Asp Gly Arg Ile His Ser Asn Ser Ser Ser Glu Glu Val Ser

Gln Glu Leu Glu Ser Asp Asp Gly

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<210> 3240
<211> 588
<212> PRT
<213> Homo sapiens
<400> 3240
Met Asp Thr Asn Asp Asp Pro Asp Glu Asp His Leu Thr Ser Tyr Asp
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                                      10
Ile Gln Leu Ser Ile Gln Glu Ser Ile Glu Ala Ser Lys Thr Ala Leu
                                 25
                                                      30
Cys Pro Glu Arg Phe Val Pro Leu Ser Ala Gln Asn Arg Lys Leu Val
         35
                             40
                                                  45
Glu Ala Ile Lys Gln Gly His lle Leu Glu Leu Gln Glu Tyr Val Lys
                         55
Tyr Lys Tyr Ala Met Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu
 65
                     70
                                          75
His Glu Ala Val Val Gln Pro Ile Gln Gln Ile Leu Glu Ile Val Leu
                 85
                                      90
Asp Ala Ser Tyr Lys Thr Leu Trp Glu Phe Lys Thr Cys Asp Gly Glu
                                105
                                                     110
Thr Pro Leu Thr Leu Ala Val Lys Ala Gly Leu Val Glu Asn Val Arg
        115
                            120
                                                 125
Thr Leu Leu Glu Lys Gly Val Trp Pro Asn Thr Lys Asn Asp Lys Gly
                        135
Glu Thr Pro Leu Leu Ile Ala Val Lys Lys Gly Ser Tyr Asp Met Val
145
                    150
                                        155
Ser Thr Leu lle Lys His Asn Thr Ser Leu Asp Gln Pro Cys Val Lys
                                    170
                                                         175
Arg Trp Ser Ala Met His Glu Ala Ala Lys Gln Gly Arg Lys Asp Ile
            180
                                185
Val Ala Leu Leu Lys His Gly Gly Asn Val His Leu Arg Asp Gly
        195
                            200
                                                205
Phe Gly Val Thr Pro Leu Gly Val Ala Ala Glu Tyr Gly His Cys Asp
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	210					215					220				
Val	Leu	Glu	His	Leu	He	His	Lys	Gly	Gly	Asp	Val	Leu	Ala	Leu	Ala
225					230					235					240
Asp	Asp	Gly	Λla	Ser	Val	Leu	Phe	Glu	Ala	Λla	Gly	Gly	Gly	Asn	Pro
				245					250					255	
Asp	Cys	He	Ser	Leu	Leu	Leu	Glu	Tyr	Gly	Gly	Ser	Gly	Asn	Val	Pro
			260					265					270		
Asn	۸rg	Ala	Gly	His	Leu	Pro	Пe	His	Arg	Ala	Ala	Tyr	Glu	Gly	His
		275					280					285			
Tyr	Leu	Ala	Leu	Lys	Tyr	Leu	lle	Pro	Val	Thr	Ser	Lys	Asn	Ala	He
	290					295					300				
Arg	Lys	Ser	Gly	Leu	Thr	Pro	He	His	Ser	Ala	Ala	Asp	Gly	Gln	Asn
305					310					315					320
Ala	Gln	Cys	Leu	Glu	Leu	Leu	Пе	Glu	Asn	Gly	Phe	Asp	Val	Asn	Thr
				325					330					335	
Leu	Leu	Ala	Asp	His	He	Ser	Gln	Ser	Cys	Asp	Asp	Glu	Arg	Lys	Thr
			340					345					350		
Ala	Leu	Tyr	Phe	Ala	Va]	Ser	Asn	Asn	Asp	Val	His	Cys	Thr	Glu	Val
		355					360					365			
Leu	Leu	Ala	Ala	Gly	Ala	Asp	Pro	Asn	Leu	Asp	Pro	Leu	Asn	Cys	Leu
	370					375					380				
Leu	Val	Ala	Val	Arg	Ala	Asn	Asn	Tyr	Glu	He	Val	Arg	Leu	Leu	Leu
385					390					395					400
Ser	llis	Gly	Ala	Asn	Val	Asn	Cys	Tyr	Phe	Met	His	Va]	Asn	Asp	Thr
				405					410					415	
Arg	Phe	Pro		Val	He	Gln	Tyr		Leu	Asn	Asp	Glu		Met	Leu
			420				_	425				_	430	_	_
Arg	Leu		Leu	Asn	Asn	G1 y		GIn	Val	Glu	Met		Phe	Asp	Cys
		435			DI	0.1	440		DI	1	æ	445	0.1		0.1
Met		Gly	Asp	He	Phe	Gly	Asn	Ser	Phe	Val		Ser	Glu	He	GIn
C I	450	17 1		D	C 1	455	T)	C	C	\; }	460	,			13
	Glu	vaj	Leu	Pro		Trp	Inr	Ser	Cys		116	Lys	Asp	Asn	
465	C	C1	Dl. a	11.	470	V 1	D	Т	Mad	475	11: ~	l a s	Vic.1	C1	480
rue	Cys	OIU	F116	485	1111	Val	1.0	тгр		LyS	nis	Leu	v a I	495	игg
Vol	The	Ara	Val		11.	Asp	Tym	Mot	490	Tur	Vol	Dro	Lov		Λ1
101	1.111	nrg	vall	しられ	116	usb	1 9 1	MEL	nsp	I y I	Val	110	ルピロ	UYS	nid

500 505 510 Lys Leu Lys Ser Ala Leu Glu Val Gln Arg Glu Trp Pro Glu lle Arg 515 520 525 Gln 11e Leu Glu Asn Pro Cys Ser Leu Lys His Leu Cys Arg Leu Lys 535 540 Ile Arg Arg Leu Met Gly Leu Gln Lys Leu Cys Gln Pro Ala Ser Val 550 555 Glu Lys Leu Pro Leu Pro Pro Ala Ile Gln Arg Tyr Ile Leu Phe Lys 565 570 575 Glu Tyr Asp Leu Tyr Gly Gln Glu Leu Lys Leu Thr 580 585

<210> 3241

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3241

Met Gln Gly Leu Ser Val Cys Leu Ser Phe Ser Leu Arg Asn Glu Asn
1 5 10 15

Pro Asp Leu Arg Ala Val Gln Leu Arg Ala His Tyr Leu Pro Ser Pro 20 25 30

Ser Arg Pro Gln Pro His His Pro Thr Cys Pro Leu Pro Pro Thr Ser 35 40 45

Ser Gly Ala Phe Ser Arg Cys Leu Met Val Gly Gly Phe Leu Met Gly 50 55 60

Gln Glu Arg Arg Ala Ser Ser Cys Asp Ser Thr Val Trp Val Lys Cys 65 70 75 80

Pro Val Arg Ala Trp Cys Gly Glu Leu Ala Ser Glu Glu Pro Leu Val 85 90 95

Gly Lys Arg Glu Val Gly

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<211> 192
<212> PRT
<213> Homo sapiens
<400> 3242
Met Glu Arg Gln Pro Gly Pro Val Arg Gly Lys Leu Gln 11e Phe Gln
                                     10
Lys Thr Glu Lys Asp Pro Gln Ala Arg Ala Gly Ser Pro Val Gln Glu
                                                      30
             20
                                 25
Tyr His Thr Ala Leu Val Ala Gly Asp Leu Asp His Leu Lys Pro Leu
                             40
Met Asp Gln Phe Phe Gln Asp Ala Asn Val Val Phe Glu lle Asn Lys
     50
                         55
                                              60.
Asp Glu Met Glu Trp Gln Val Lys Ser Pro Ala Thr Phe Gly Leu Ser
                                          75
                     70
 65
Gly Leu Trp Thr Leu Glu Tyr Lys Arg Glu Leu Thr Thr Pro Leu Cys
                                      90
                 85
lle Ala Ala Ala His Gly His Thr Ala Cys Val Arg His Leu Leu Gly
                                 105
                                                     110
            100
Arg Gly Ala Asp Pro Asp Ala Ser Pro Ala Gly Pro Arg Val Pro Asp
```

Arg Ile Leu Arg Ser Pro Gly Leu Thr Ala Ala His Gly Ala Gly Ala 130 135 140

120

Ala Gln Pro Arg Leu Ser His Arg Val Ala Arg Arg Leu Pro Gln Gly
145 150 155 160

Ala Glu Asp Leu Cys Ile Cys Pro Arg Ser His Arg Gly Ala Phe Gln 165 170 175

Leu Leu Pro Ser Ala Leu Leu Val Arg Val Leu Glu Gly Ser Asp Ser 180 185 190

<210> 3243

<211> 315

<212> PRT

<213> Homo sapiens

<400	0> 32	243													
Met	Met	Ser	Ser	Val	Ser	Thr	Glu	Ser	Lys	Leu	Gln	Gln	Ala	Val	Ser
1				5					10					15	
Leu	Gln	Gly	Va1	Asp	Pro	Glu	Thr	Cys	Met	lle	Val	Phe	Lys	Asn	His
			20					25					30		
Trp	Ala	Gln	Val	Val	Lys	lle	Leu	Glu	Lys	His	Asp	Pro	Leu	Lys	Asn
		35					40					45			
Thr	Gln	Ala	Lys	Tyr	Gly	Ser	lle	Pro	Pro	Asp	Glu	Ala	Ser	Ala	Va]
	50					55					60				
Gln	Asn	Tyr	Val	Glu	His	Met	Leu	Phe	Leu	Leu	Ile	Glu	Glu	Gln	Ala
65					70					75					80
Lys	Asp	Ala	Ala	Met	Gly	Pro	He	Leu	Glu	Phe	Val	Val	Ser	G] u	Asn
				85					90					95	
11e	Met	Glu	Lys	Leu	Phe	Leu	Trp	Ser	Leu	Arg	Arg	Glu	Phe	Thr	Λsp
			100					105					110		
Glu	Thr	Lys	Пe	Glu	Gln	Leu	Lys	Met	Tyr	Glu	Met	Leu	Val	Thr	G1n
		115					120					125			
Ser	His	Gln	Pro	Leu	Leu	His	His	Lys	Pro	lle	Leu	Lys	Pro	Leu	Met
	120														
	130					135					140				
Met		Leu	Ser	Ser	Cys		Gly	Thr	Thr	Thr	Pro	Thr	Val	Glu	Glu
Met 145		Leu	Ser	Ser	Cys 150		Gly	Thr	Thr	Thr 155		Thr	Val	Glu	G1u 160
145	Leu				150	Ser				155					160
145	Leu				150	Ser				155	Pro				160
145 Lys	Leu Leu	Val	Val	Leu 165	150 Leu	Ser Asn	Gln	Leu	Cys 170	155 Ser	Pro	Leu	Ala	Lys 175	160 Asp
145 Lys	Leu Leu	Val	Val	Leu 165	150 Leu	Ser Asn	Gln	Leu	Cys 170	155 Ser	Pro 11e	Leu	Ala	Lys 175	160 Asp
145 Lys Pro	Leu Leu Ser	Va] He	Val Leu 180	Leu 165 Glu	150 Leu Leu	Ser Asn Phe	Gln Phe	Leu His 185	Cys 170 Thr	155 Ser Ser	Pro 11e	Leu Asp	Ala Gln 190	Lys 175 Gly	160 Asp Ala
145 Lys Pro	Leu Leu Ser	Va] He	Val Leu 180	Leu 165 Glu	150 Leu Leu	Ser Asn Phe	Gln Phe	Leu His 185	Cys 170 Thr	155 Ser Ser	Pro 11e Glu	Leu Asp	Ala Gln 190	Lys 175 Gly	160 Asp Ala
145 Lys Pro Ala	Leu Leu Ser Asn	Val He Phe 195	Val Leu 180 Leu	Leu 165 Glu 11e	150 Leu Leu Phe	Ser Asn Phe Ser	Gln Phe Leu 200	Leu His 185 Leu	Cys 170 Thr	155 Ser Ser Pro	Pro 11e Glu	Leu Asp 11e 205	Ala Gln 190 His	Lys 175 Gly Arg	160 Asp Ala Glu
145 Lys Pro Ala	Leu Leu Ser Asn	Val He Phe 195	Val Leu 180 Leu	Leu 165 Glu 11e	150 Leu Leu Phe	Ser Asn Phe Ser	Gln Phe Leu 200	Leu His 185 Leu	Cys 170 Thr	155 Ser Ser Pro	Pro 11e Glu Phe	Leu Asp 11e 205	Ala Gln 190 His	Lys 175 Gly Arg	160 Asp Ala Glu
145 Lys Pro Ala Gly	Leu Leu Ser Asn Ser 210	Val He Phe 195 Val	Val Leu 180 Leu Gly	Leu 165 Glu 11e Gln	150 Leu Leu Phe G1n	Ser Asn Phe Ser Ala 215	Gln Phe Leu 200 Arg	Leu His 185 Leu Asp	Cys 170 Thr Ile	155 Ser Ser Pro	Pro Ile Glu Phe Leu	Leu Asp 11e 205 Phe	Ala Gln 190 His	Lys 175 Gly Arg Met	160 Asp Ala Glu Ser
145 Lys Pro Ala Gly	Leu Leu Ser Asn Ser 210	Val He Phe 195 Val	Val Leu 180 Leu Gly	Leu 165 Glu 11e Gln	150 Leu Leu Phe G1n	Ser Asn Phe Ser Ala 215	Gln Phe Leu 200 Arg	Leu His 185 Leu Asp	Cys 170 Thr Ile	155 Ser Ser Pro	Pro 11e Glu Phe Leu 220	Leu Asp 11e 205 Phe	Ala Gln 190 His	Lys 175 Gly Arg Met	160 Asp Ala Glu Ser
145 Lys Pro Ala Gly Leu 225	Leu Ser Asn Ser 210 Ser	Val The Phe 195 Val	Val Leu 180 Leu Gly	Leu 165 Glu 11e Gln Asn	150 Leu Leu Phe Gln Thr 230	Ser Asn Phe Ser Ala 215 Met	Gln Phe Leu 200 Arg Val	Leu His 185 Leu Asp	Cys 170 Thr Ile Ala His	155 Ser Ser Pro Leu His 235	Pro 11e Glu Phe Leu 220	Leu Asp 11e 205 Phe Val	Ala Gln 190 His Ile	Lys 175 Gly Arg Met	160 Asp Ala Glu Ser Thr 240
145 Lys Pro Ala Gly Leu 225	Leu Ser Asn Ser 210 Ser	Val The Phe 195 Val	Val Leu 180 Leu Gly	Leu 165 Glu 11e Gln Asn	150 Leu Leu Phe Gln Thr 230	Ser Asn Phe Ser Ala 215 Met	Gln Phe Leu 200 Arg Val	Leu His 185 Leu Asp	Cys 170 Thr Ile Ala His	155 Ser Ser Pro Leu His 235	Pro He Glu Phe Leu 220 He	Leu Asp 11e 205 Phe Val	Ala Gln 190 His Ile	Lys 175 Gly Arg Met	160 Asp Ala Glu Ser Thr 240
145 Lys Pro Ala Gly Leu 225 Tyr	Leu Ser Asn Ser 210 Ser	Val He Phe 195 Val Ala	Val Leu 180 Leu Gly Glu Pro	Leu 165 Glu 11e Gln Asn Val 245	150 Leu Leu Phe Gln Thr 230 Leu	Asn Phe Ser Ala 215 Met	Gln Phe Leu 200 Arg Val	Leu His 185 Leu Asp Ala Gly	Cys 170 Thr Ile Ala His Leu 250	Ser Ser Pro Leu His 235 Ser	Pro He Glu Phe Leu 220 He	Leu Asp 11e 205 Phe Val	Ala Gln 190 His Ile Glu Tyr	Lys 175 Gly Arg Met Asn Ser 255	Ala Glu Ser Thr 240 Ser
145 Lys Pro Ala Gly Leu 225 Tyr	Leu Ser Asn Ser 210 Ser	Val He Phe 195 Val Ala	Val Leu 180 Leu Gly Glu Pro	Leu 165 Glu 11e Gln Asn Val 245	150 Leu Leu Phe Gln Thr 230 Leu	Asn Phe Ser Ala 215 Met	Gln Phe Leu 200 Arg Val	Leu His 185 Leu Asp Ala Gly	Cys 170 Thr Ile Ala His Leu 250	Ser Ser Pro Leu His 235 Ser	Pro Ile Glu Phe Leu 220 Ile Gly	Leu Asp 11e 205 Phe Val	Ala Gln 190 His Ile Glu Tyr	Lys 175 Gly Arg Met Asn Ser 255	Ala Glu Ser Thr 240 Ser

Asp Glu Ala Ala Phe Ala Ser Arg His Pro Val Arg Thr Gln Ser Thr Pro Phe Thr Gly Pro Phe Ile Ser Val Val Leu <210> 3244 <211> 298 <212> PRT <213> Homo sapiens <400> 3244 Met Leu Asp Gly Leu Gln Arg Leu Arg Ser Gln Pro Lys Leu Ala Asp Val Thr Leu Leu Val Gly Gly Arg Glu Leu Pro Cys His Arg Gly Leu Leu Ala Leu Ser Ser Pro Tyr Phe His Ala Met Phe Ala Gly Asp Phe Ala Glu Ser Phe Ser Ala Arg Val Glu Leu Arg Asp Val Glu Pro Ala Val Val Gly Gln Leu Val Asp Phe Val Tyr Thr Gly Arg Leu Thr Ile Thr Gln Gly Asn Val Glu Ala Leu Thr Arg Thr Ala Ala Arg Leu His Phe Pro Ser Val Gln Lys Val Cys Gly Arg Tyr Leu Gln Gln Gln Leu Asp Ala Ala Asn Cys Leu Gly Ile Cys Glu Phe Gly Glu Gln Gln Gly Leu Leu Gly Val Ala Ala Lys Ala Trp Ala Phe Leu Arg Glu Asn Phe Glu Ala Val Ala Arg Glu Asp Glu Phe Leu Gln Leu Pro Arg Glu Arg

Leu Val Thr Cys Leu Ala Gly Asp Leu Leu Gln Val Gln Pro Glu Gln

Gly Arg Leu Glu Ala Leu Met Arg Trp Val Arg His Asp Pro Gln Ala

			180					185					190		
Arg	Ala	Val	His	Leu	Pro	Glu	Leu	Leu	Ser	Leu	Val	His	Leu	Asp	Ala
		195					200					205			
Val	Pro	Arg	Pro	Cys	Va]	Gln	Gln	Leu	Leu	Ala	Ser	Glu	Pro	Leu	11e
	210					215					220				
Gln	Glu	Ser	Glu	Ala	Cys	Arg	Ala	Ala	Leu	Ser	Gln	Gly	His	Asp	G1 y
225					230					235					240
Ala	Pro	Leu	Ala	Leu	Gln	Gln	Lys	Leu	Glu	Glu	Val	Leu	Va]	Val	Val
				245					250					255	
Gly	Gly	Gln	Ala	Leu	Glu	Glu	Glu	Glu	Ala	Gly	Glu	Glu	Pro	Thr	Pro
			260					265					270		
Gly	Leu	Gly	Asn	Phe	Ala	Phe	Tyr	Asn	Ser	Lys	Ala	Lys	Arg	Trp	Met
		275					280					285			
Ala	Leu	Pro	Asp	Phe	Pro	Asp	Tyr	His	Lys						
	290					295									

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3245

Met Cys Arg Cys Arg Arg Tyr Arg Arg Arg Gly Arg Val Trp Gly Gly 1 Ala Gly Asp Ser Arg Ala Ala Gly Asn Arg Ser Gly Ser Gly Ala Ala 25 Pro Gly Leu Arg Trp Gly Gly Val Arg His Trp Pro His Leu Val 11e 35 40 45 Pro Ala Ala His Arg Pro Gln Phe Pro Arg Leu Leu Asn Gly Tyr Ala 55 Gly Gly Ala Thr Gly Trp IIe Trp IIe Arg IIe Arg Gly IIe Gly IIe 70 75 80 65 Gly Ala Ser Cys Val Leu Gly Val Ser Cys Asn Leu Glu Leu Gly Val 90 85

Ala Arg Phe Val Pro Gln Phe Pro Cys IIe Val Gly Asp Gly Ala

100 105 110

<210> 3246 <211> 676 <212> PRT <213> Homo sapiens

<400> 3246 Met Glu Pro Arg Gly Gly Gly Ser Ser Gln Phe Ser Ser Cys Pro Gly 10 Pro Ala Ser Ser Gly Asp Gln Met Gln Arg Leu Leu Gln Gly Pro Ala 20 25 Pro Arg Pro Pro Gly Glu Pro Pro Gly Ser Pro Lys Ser Pro Gly His 40 Ser Thr Gly Ser Gln Arg Pro Pro Asp Ser Pro Gly Ala Pro Pro Arg 55 60 Ser Pro Ser Arg Lys Lys Arg Arg Ala Val Gly Ala Lys Gly Gly 70 75 65 80 His Thr Gly Ala Ser Ala Ser Ala Gln Thr Gly Ser Pro Leu Leu Pro 85 90 Ala Ala Ser Pro Glu Thr Ala Lys Leu Met Ala Lys Ala Gly Gln Glu 100 105 110 Glu Leu Gly Pro Gly Pro Ala Gly Ala Pro Glu Pro Gly Pro Arg Ser 120 Pro Val Gln Glu Asp Arg Pro Gly Pro Gly Leu Gly Leu Ser Thr Pro 135 140 Val Pro Val Thr Glu Gln Gly Thr Asp Gln 11e Arg Thr Pro Arg Arg 150 155 160 145 Ala Lys Leu His Thr Val Ser Thr Thr Val Trp Glu Ala Leu Pro Asp 170 Val Ser Arg Ala Lys Ser Asp Met Ala Val Ser Thr Pro Ala Ser Glu 180 185 190 Pro Gln Pro Asp Arg Asp Met Ala Val Ser Thr Pro Ala Ser Glu Pro 205 195 200

Gln Ser Asp Arg Asp Met Ala Val Ser Thr Pro Ala Ser Glu Pro Gln

	210					215					220				
Pro	Asp	Thr	Asp	Met	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro	G1n	Pro
225					230					235					240
Asp	Arg	Asp	Met	Ala	Val	Ser	lle	Pro	Ala	Ser	Lys	Pro	Gln	Ser	Asp
				245					250					255	
Thr	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro	Gln	Ser	Ser	Val	Ala	Leu
			260					265					270		
Ser	Thr	Pro	He	Ser	Lys	Pro	Gln	Leu	Asp	Thr	Asp	Val	Ala	Val	Ser
		275					280					285			
Thr	Pro	Ala	Ser	Lys	His	Gly	Leu	Asp	Val	Ala	Leu	Pro	Thr	Ala	Gly
	290					295					300				
Pro	Val	Ala	Lys	Leu	Glu	Val	Ala	Ser	Ser	Pro	Pro	Val	Ser	G] u	Ala
305					310					315					320
Val	Pro	Arg	Met	Thr	Glu	Ser	Ser	Gly	Leu	Val	Ser	Thr	Pro	Val	Pro
				325					330					335	
Arg	Ala	Asp	Ala	Ala	Gly	Leu	Ala	Trp	Pro	Pro	Thr	Arg	Arg	Ala	Gly
			340					345					350		
Pro	Asp		Val	Glu	Met	Glu		Val	Val	Ser	Glu	Pro	Ser	Ala	Gly
		355					360					365			
Ala		Gly	Cys	Cys	Ser		Ala	Pro	Ala	Leu		Leu	Thr	61n	Val
_	370					375		_			380			_	
	Arg	Lys	Lys	Lys		Arg	Phe	Ser	Val		G1 y	Pro	Gly	Pro	
385	15	0.1	0	0.1	390	4.7				395					400
Lys	Pro	Gly	Ser		GIn	Ala	Ser	Mla	_	Pro	Ser	Ala	Leu	Gln	Thr
41-	Th.	C1	A 1 =	405	C1	C1	D	C1	410	т	C1	4.1	V . 1	415	· · ·
Ala	ınr	ыу		HIS	61y	GIY	Pro		Ala	Trp	61u	ATa		Ala	Va1
Clu	Dro	Ara	420 Pro	u; c	Cln	Dro	Amer	425	Lau	Luc	u; c	Lau	430	Arg	Dage
Oly	110	435	110	1115	0111	110	440	116	Leu	rys	111.5	445	110	AJ g	110
Pro	Pro		Ala	Val	Thr	Ara		Glv	Pro	Glv	Sor		Pho	Ala	Val
110	450	561	MIG	141	1111	455	, (1)	Oly	110	Oiy	460	561	1110	111 ci	v (1)
Thr		Pro	Glu	Ala	Tvr		Phe	Phe	Phe	Cvs		Thr	T1e	Glu	Glu
465	Lea		0.10	,,,,,	470	Ola	1110	1110	7 110	475	11,5		,,,	Olu	480
	Glu	Glu	Λla	Glu		Λla	Ala	Ala	Glv		Asn	Pro	Ala	Gly	
				485					490		1-	•	,.,.,	495	
Gln	Trp	Pro	Asp		Cvs	Glu	Phe	Phe		Pro	Asp	Val	Glv	Ala	Gln

Arg Ser Arg Arg Arg Gly Ser Pro Glu Pro Leu Pro Arg Ala Asp Pro Val Pro Ala Pro Ile Pro Gly Asp Pro Val Pro Ile Ser Ile Pro Glu Val Tyr Glu His Phe Phe Phe Gly Glu Asp Arg Leu Glu Gly Val Leu Gly Pro Ala Val Pro Leu Pro Leu Gln Ala Leu Glu Pro Pro Arg Ser Ala Ser Glu Gly Ala Gly Pro Gly Thr Pro Leu Lys Pro Ala Val Val Glu Arg Leu His Leu Ala Leu Arg Arg Ala Gly Glu Leu Arg Gly Pro Val Pro Ser Ser Ala Phe Ser Gln Asn Asp Met Cys Leu Val Phe Val Ala Phe Ala Thr Trp Ala Val Arg Thr Ser Asp Pro His Thr Pro Asp Ala Trp Lys Thr Ala Leu Leu Ala Asn Val Gly Thr Ile Ser Ala lle Arg Tyr Phe Arg Arg Gln Val Gly Gln Gly Arg Arg Ser His Ser Pro Ser Pro Ser Ser

<210> 3247

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3247

 Met Ser Ser Asn Gln Cys Pro Gly Val His Gly Ser Ser Leu Ala Tyr

 1
 5
 10
 15

 Cys Ser Gly Leu His Ser Leu Gly His Cys Cys Leu Cys Arg Tyr Lys
 20
 25
 30

 Lys Lys Lys Lys Glu Lys Gln Lys Lys Glu Gly Thr Ala Ala Ser Gln

Asn Val Asn Gln Asn Ile Ser Leu Trp Tyr Trp Glu Arg Lys Arg Arg Phe Pro Arg Glu Asp Glu Asp Gln Thr Asp Cys Arg Pro Ala lle Ser Leu His Cys Thr Trp 11e Gly His Leu Leu Tyr Ala Pro Gly Lys Lys lle Gln Arg Thr Met Leu Leu <210> 3248 <211> 143 <212> PRT <213> Homo sapiens <400> 3248 Met Ala Asp His Asn Pro Asp Ser Asp Ser Thr Pro Arg Thr Leu Leu Arg Arg Val Leu Asp Thr Ala Asp Pro Arg Thr Pro Arg Arg Pro Arg Ser Ala Arg Ala Gly Ala Arg Arg Ala Leu Leu Glu Thr Ala Ser Pro Arg Lys Leu Ser Gly Gln Thr Arg Thr lle Ala Arg Gly Arg Ser His Gly Ala Arg Val Ser Thr Gln Pro Thr Asp Pro Lys Gly Pro Trp Leu Pro Arg Gly Gly Leu Arg Ser Ser Ser Ala Leu Glu Pro Thr Leu Arg Lys Ser Gln Gly Arg Arg Thr Asp Trp Leu Leu Gly Ala Leu Pro He Val Cys Trp Gln He Gly Pro Tyr Ser Gly Gln Trp Ala Leu Gly Gly Thr Asp Thr Ser Asp Ala Ala Glu Glu His Pro Thr Asn Trp

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<210> 3249
<211> 103
<212> PRT
<213> Homo sapiens
<400> 3249
Met Lys Glu Lys Ile Leu Arg Ala Ala Arg Glu Lys Gly Arg Ala Thr
 1
                  5
                                      10
His Lys Gly Lys Pro Ile Ser Leu Thr Ala Asp Leu Ser Thr Glu Thr
                                  25
Leu Gln Ala Arg Arg Glu Trp Gly Pro Ile Phe Asn Ile Leu Lys Glu
         35
                              40
                                                  45
Lys Asn Phe Gln Pro Arg Ile Ser Tyr Pro Ala Lys Leu Ser Phe Ile
                         55
Ser Glu Gly Glu Ile Lys Ser Phe Thr Asp Lys Arg Ile Leu Arg Asp
                     70
                                          75
Phe Val Thr Thr Arg Pro Ala Leu Gln Gly Leu Leu Lys Glu Ala Leu
                 85
                                      90
                                                          95
Asn Met Glu Arg Lys Asn Trp
            100
<210> 3250
<211> 367
<212> PRT
<213> Homo sapiens
<400> 3250
Met Arg Gln Lys lle Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys
Thr Gly Phe Ile Ala Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys
             20
                                                      30
Gln Gln Phe Ser Thr Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg
```

40

Pro Gly Thr Gln Met Val Cys Thr Phe Cys Pro Pro Pro Leu Pro Lys

	50					55					60				
Pro	Ser	Ser	Thr	Thr	Pro	Thr	Pro	Leu	Val	Ser	Glu	Thr	Gly	Gly	Asn
65					70					75					80
Ser	Pro	Ser	Asp	Lys	Val	Asp	Asn	Glu	Leu	Lys	Asn	Leu	Glu	His	Leu
				85					90					95	
Ser	Ser	Phe	Ser	Ser	Asp	Glu	Asp	Asp	Pro	G1 y	Tyr	Ser	Gln	Asp	Ala
			100					105					110		
Tyr	Lys	Ser	Val	Ser	Thr	Pro	Leu	Thr	Thr	Leu	Asp	Ala	Thr	Ser	Asp
		115					120					125			
Lys	Lys	Lys	Lys	Thr	Glu	Ala	Leu	Gln	Val	Ala	Thr	Thr	Ser	Pro	Thr
	130					135					140				
Ala	Asn	Thr	Thr	Gly	Thr	Ala	Thr	Thr	Ser	Ser	Thr	Thr	Va]	Gly	Ala
145					150					155					160
Val	Lys	Gln	Glu	Pro	Leu	His	Ser	Thr	Ser	Tyr	Ala	Val	Asn	lle	Leu
				165					170					175	
Glu	Asn	He	Ser	Ser	Ser	Glu	Ser	Ser	Lys	Pro	lle	Glu	Leu	Asp	Gly
			180					185					190		
Leu	Pro	Ser	Asp	Gln	Phe	Ala	Lys	Gly	Gln	Asp	Thr	Val	Ala	He	Glu
		195					200					205			
Gly	Phe	Thr	Asp	Glu	Glu	Asp	Thr	Glu	Ser	Gly	Gly	Glu	Gly	Gln	Tyr
	210					215					220				
Arg	Glu	Arg	Asp	Glu	Phe	Val	Val	Lys	He	Glu	Asp	lle	Glu	Thr	
225					230					235					240
Lys	G] u	Ala	Leu		Thr	Gly	Lys	Glu		Pro	Ala	lle	Trp		Val
				245					250					255	
Gln	Lys	Ala		Leu	Gln	Lys	Phe		Pro	Val	lle	Arg		Gly	Gln
			260				_	265					270		
Arg	Glu		Ala	Ala	Thr	Asn		Tyr	Leu	GIy	Tyr		G1 y	Asp	Ala
		275	m	,			280	1	,	DI		285			
Lys		Lys	lyr	Lys	Arg		lyr	Val	Lys	Phe		Glu	Asn	Ala	Asn
	290	0.1	Tr.			295	0	0			300				D
	Lys	61u	lyr	Val	Arg	Val	Cys	Ser	Lys		Pro	Arg	Asn	Lys	
305	C1	The	7.1	Α.	310	V . 1	C1	A 1	f	315	C -	C -	C =	C = -	320
5er	GIn	Inr	116		Thr	val	GIn	Ala		rro	ser	ser	ser		Lys
The	Sar	A 05	Dno	325	Ala	Co-	1	Tl	330	The	The	Luc	A 1 ~	335	San
III'	Ser	nsp	$-\Gamma TO$	ren	MIA	ser	LVS	tor.	-1117	1111	1111	LVS	MIA	110	Ser

 Val Lys
 Pro Lys
 Val Lys
 Gln
 Pro Lys
 Val Lys
 Ala
 Glu
 Pro Pro Pro Age

 355
 360
 365

<210> 3251

<211> 1367

<212> PRT

<213> Homo sapiens

<400> 3251

Met Gly Asn Ser Asp Ser Gln Tyr Thr Leu Gln Gly Ser Lys Asn His

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Ser Asn Thr Ile Thr Gly Ala Lys Gln Ile Pro Cys Ser Leu Lys Ile 20 25 30

Arg Gly Ile His Ala Lys Glu Glu Lys Ser Leu His Gly Trp Gly His
35 40 45

Gly Ser Asn Gly Ala Gly Tyr Lys Ser Arg Ser Leu Ala Arg Ser Cys
50 55 60

Leu Ser His Phe Lys Ser Asn Gln Pro Tyr Ala Ser Arg Leu Gly Gly
65 70 75 80

Pro Thr Cys Lys Val Ser Arg Gly Val Ala Tyr Ser Thr His Arg Thr
85 90 95

Asn Ala Pro Gly Lys Asp Phe Gln Gly Ile Ser Ala Ala Phe Ser Thr 100 105 110

Glu Asn Gly Phe His Ser Val Gly His Glu Leu Ala Asp Asn His Ile 115 120 125

Thr Ser Arg Asp Cys Asn Gly His Leu Leu Asn Cys Tyr Gly Arg Asn 130 135 140

Glu Ser lle Ala Ser Thr Pro Pro Gly Glu Asp Arg Lys Ser Pro Arg 145 150 155 160

Val Leu lle Lys Thr Leu Gly Lys Leu Asp Gly Cys Leu Arg Val Glu 165 170 175

Phe His Asn Gly Gly Asn Pro Ser Lys Val Pro Ala Glu Asp Cys Ser 180 185 190

Glu Pro Val Gln Leu Leu Arg Tyr Ser Pro Thr Leu Ala Ser Glu Thr

		195					200					205			
Ser	Pro	Val	Pro	Glu	Ala	Arg	Arg	Gly	Ser	Ser	Ala	Лsp	Ser	Leu	Pro
	210					215					220				
Ser	His	Arg	Pro	Ser	Pro	Thr	Asp	Ser	Arg	Leu	Arg	Ser	Ser	Lys	Gly
225					230					235					240
Ser	Ser	Leu	Ser	Ser	Glu	Ser	Ser	Trp	Tyr	Asp	Ser	Pro	Trp	Gly	Asn
				245					250					255	
Ala	Gly	Glu	Leu	Ser	Glu	Ala	G] u	Gly	Ser	Phe	Leu	Ala	Pro	Gly	Met
			260					265					270		
Pro	Asp	Pro	Ser	Leu	His	Ala	Ser	Phe	Pro	Pro	Gly	Asp	Ala	Lys	Lys
		275					280					285			
Pro	Phe	Asn	Gln	Ser	Ser	Ser	Leu	Ser	Ser	Leu	Arg	Glu	Leu	Tyr	Lys
	290					295					300				
Asp	Ala	Asn	Leu	Gly	Ser	Leu	Ser	Pro	Ser	Gly	He	Arg	Leu	Ser	Asp
305					310					315					320
Glu	Tyr	Met	Gly		His	Ala	Ser	Leu	Ser	Asn	His	Val	Ser	Phe	Ala
				325					330					335	
Ser	Asp	He		Val	Pro	Ser	Arg		Ala	His	Gly	Asp		He	Gln
			340					345					350		
Tyr	Ser		Phe	Thr	Leu	Pro		Arg	Lys	Pro	Lys		Phe	Val	Glu
	m)	355				•	360					365			
Asp	Thr	Ala	Lys	Lys	Asp		Leu	Lys	Ala	Arg		Arg	Arg	He	Ser
	370	TI	C.I.	C		375			1		380		0.1	C.1	D
	Trp	Inr	GIŸ	2er		Ser	Arg	Lys	Lys		Lys	Leu	61n	61u	
385	Can	Lua	C1	C1	390	۸ ۵ ۵	Т	Dha	A = ==	395	A 24.00	C.a.u	Λ	C1	400
Arg	Ser	Lys	GIU		261	ASP	1 у 1	rne		ser	Arg	Ser	ASP		Leu
Acn	The	Acn	Val	405 Gln	C1v	Sor	Sor	Cln	410	Sor	A10	Dho	Lou	415 Trn	Sor
лы	Thr	лър	420	0111	Oly	Se.I	261	425	Ма	261	MIG	rne	430	цр	261
Glv	Gly	Ser		Gln	He	Leu	Ser		Aro	Ser	Glu	Ser		His	Ala
O1,	019	435		0111	110	Lcu	440	0,11	, n 6	50,	0,0	445		1113	niu
He	Gly		Asp	Pro	l.eu	Arg		Asn	He	Tvr	Glu		Phe	Met	Arg
	450					455					460				0
G1u	Leu	Glu	Met	Ser	Arg		Asn	Thr	Glu	Asn		Glu	Thr	Ser	Thr
465					470					475					480
	Thr	Ala	Glu	Ser		Sar	Glu	Sor	Lau		Sor	lau	Glu	G1n	

				485					490					495	
Asp	Leu	Leu	Phe	Glu	Lys	Glu	Gln	Gly	Val	Val	Arg	Lys	Ala	Gly	Trp
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Leu	Phe	Phe	Lys	Pro	Leu	Val	Thr	Val	Gln	Lys	Glu	Arg	Lys	Leu	Glu
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Leu	Val	Ala	Arg	Arg	Lys	Trp	Lys	Gln	Tyr	Trp	Val	Thr	Leu	Lys	Gly
	530					535					540				
Cys	Thr	Leu	Leu	Phe	Tyr	Glu	Thr	Tyr	Gly	Lys	Asn	Ser	Met	Asp	Gln
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Ser	Ser	Ala	Pro	Arg	Cys	Ala	Leu	Phe	Ala	Glu	Asp	Ser	Пe	Val	Gln
				565					570					575	
Ser	Val	Pro	Glu	His	Pro	Lys	Lys	G] u	Asn	Val	Phe	Cys	Leu	Ser	Asn
			580					585					590		
Ser	Phe	Gly	Asp	Val	Tyr	Leu	Phe	Gln	Ala	Thr	Ser	Gln	Thr	Asp	Leu
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Glu	Asn	Trp	Val	Thr	Ala	Val	His	Ser	Ala	Cys	Ala	Ser	Leu	Phe	Ala
	610					615					620				
Lys	Lys	His	Gly	Lys	Glu	Asp	Thr	Leu	Arg	Leu	Leu	Lys	Asn	Gln	Thr
625					630					635					640
Lys	Asn	Leu	Leu	Gln	Lys	lle	Asp	Met	Asp	Ser	Lys	Met	Lys	Lys	Met
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Ala	Glu	Leu	Gln	Leu	Ser	Val	Val	Ser	Asp	Pro	Lys	Asn	Arg	Lys	Ala
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He	Glu	Asn	Gln	He	GIn	Gln	Trp	Glu	Gln	Asn	Leu	Glu	Lys	Phe	His
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Met	Asp	Leu	Phe	Arg	Met	Arg	Cys	Tyr	Leu	Ala	Ser	Leu	Gln	Gly	Gly
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Glu	Leu	Pro	Asn	Pro	Lys	Ser	Leu	Leu	Ala	Ala	Ala	Ser	Arg	Pro	Ser
705					710					715					720
Lys	Leu	Ala	Leu	Gly	Arg	Leu	Gly	lle	Leu	Ser	Val	Ser	Ser	Phe	His
				725					730					735	
Ala	Leu	Val	Cys	Ser	Arg	Asp	Asp	Ser	Λla	Leu	Arg	Lys	Arg	Thr	Leu
			740					745					750		
Ser	Leu	Thr	Gln	Arg	Gly	Arg	Asn	Lys	Lys	Gly	lle		Ser	Ser	Leu
		755					760					765			
Lys	Gly	Leu	Asp	Thr	Leu	Ala	Arg	Lys	Gly	Lys	Glu	Lys	Arg	Pro	Ser

	770					775					780				
He	Thr	Gln	Val	Asp	Glu	Leu	Leu	His	Пе	Tyr	Gly	Ser	Thr	Val	Asp
785					790					795					800
Gly	Val	Pro	Arg	Asp	Asn	Ala	Trp	Glu	lle	Gln	Thr	Tyr	Val	His	Phe
				805					810					815	
Gln	Лsp	Asn	His	Gly	Val	Thr	Val	Gly	He	Lys	Pro	Glu	His	Arg	Val
			820					825					830		
Glu	Asp	lle	Leu	Thr	Leu	Ala	Cys	Lys	Met	Arg	Gln	Leu	Glu	Pro	Ser
		835					840					845			
His	Tyr	Gly	Leu	Gln	Leu	Arg	Lys	Leu	Val	Asp	Asp	Asn	Val	Glu	Tyr
	850					855					860				
Cys	11e	Pro	Ala	Pro	Tyr	GIu	Tyr	Met	Gln	G1n	Gln	Val	Tyr	Asp	Glu
865					870					875					880
Пe	Glu	Val	Phe	Pro	Leu	Asn	Val	Tyr	Asp	Val	Gln	Leu	Thr	Lys	Thr
				885					890					895	
Gly	Ser	Val	Cys	Asp	Phe	Gly	Phe	Ala	Val	Thr	Ala	Gln	Va]	Asp	Glu
			900					905					910		
Arg	Gln	His	Leu	Ser	Arg	Ile	Phe	He	Ser	Asp	Val	Leu	Pro	Asp	Gly
		915					920					925			
Leu	Ala	Tyr	Gly	Glu	Gly	Leu	Arg	Lys	Gly	Asn	Glu	He	Met	Thr	Leu
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Asn	Gly	Glu	Ala	Val	Ser	Asp	Leu	Asp	Leu	Lys	Gln	Met	G]u	Ala	Leu
945					950					955					960
Phe	Ser	Glu	Lys		Val	Gly	Leu	Thr	Leu	Пе	Ala	Arg	Pro	Pro	Asp
				965					970					975	
Thr	Lys	Ala		Leu	Cys	Thr	Ser		Ser	Asp	Ser	Asp		Phe	Ser
			980	_		_	_	985					990	_	
Arg	Asp		Lys	Ser	Leu	Leu		Pro	Pro	Asn			Gln	Leu	Leu
0.1	<i>a</i> 1	995								6 71		005		•51	
		Phe	Leu	Asp		Phe	Lys	Lys	Asn			Asn	Asp	Phe	Ser
	010	Dura	Λ	т1.		015	C1	1	1		020	C1	T1	Α	C1
		Pro	Asp			Thr	61 y	Leu			Ser	GIN	ınr		
1025		Λ	C 1		030	,,,		C1		035	C1	C1	T)		040
1111	ren	ASP		va1 .045	ser	His	Arg			лет	oru	oin			Arg
Ser	Ala	Glu			The	Ala	Lou		1050 Arg	Sor	Pho	Acn		055 Sor	Gla

]	060]	1065]	070		
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]	1075				1	080]	1085			
Pro	Leu	Ala	Arg	His	Leu	Ser	Asp	Ala	Asp	Arg	Leu	Arg	Lys	Val	He
	1090				J	1095				1	100				
Gln	Glu	Leu	Va]	Asp	Thr	Glu	Lys	Ser	Tyr	Val	Lys	Asp	Leu	Ser	Cys
110	5]	1110				1	1115				1	120
Leu	Phe	Glu	Leu	Tyr	Leu	Glu	Pro	Leu	Gln	Asn	Glu	Thr	Phe	Leu	Thr
				1125]	1130]	1135	
Gln	Asp	Glu	Met	Glu	Ser	Leu	Phe	Gly	Ser	Leu	Pro	Glu	Met	Leu	Glu
]	1140				1	1145]	1150		
Phe	Gln	Lys	Val	Phe	Leu	Glu	Thr	Leu	Glu	Asp	G1 y	lle	Ser	Ala	Ser
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Ser	Asp	Phe	Asn	Thr	Leu	Glu	Thr	Pro	Ser	Gln	Phe	Arg	Lys	Leu	Leu
	1170]	1175]	180				
Phe	Ser	Leu	Gly	Gly	Ser	Phe	Leu	Tyr	Tyr	Ala	Asp	His	Phe	Lys	Leu
118	5				1190				j	1195]	1200
Tyr	Ser	Gly	Phe	Cys	Ala	Asn	His	Ile	Lys	Val	Gln	Lys	Va]	Leu	Glu
				1205					1210					1215	
Arg	Ala	Lys	Thr	Asp	Lys	Ala	Phe	Lys	Ala	Phe	Leu	Asp	Ala	Arg	Asn
			1220					1225					1230		
Pro	Thr	Lys	Gln	His	Ser	Ser	Thr	Leu	Glu	Ser	Tyr	Leu	He	Lys	Pro
		1235					1240					1245			
Val	Gln	Arg	Val	Leu	Lys	Tyr	Pro	Leu	Leu	Leu	Lys	Glu	Leu	Val	Ser
	1250					1255					1260				
Leu	Thr	Asp	Gln	Glu	Ser	Glu	Glu	His	Tyr	His	Leu	Thr	Glu	Ala	Leu
126	5				1270					1275					1280
Lys	Ala	Met	Glu	Lys	Val	Ala	Ser	His	lle	Asn	Glu	Met	Gln	Lys	He
				1285					1290					1295	
Tyr	Glu	Asp	Tyr	Gly	Thr	Val	Phe	Asp	Arg	Leu	Val	Ala	Glu	Gln	Ser
			1300					1305					1310		
G1y	Thr	Glu	Lys	Glu	Val	Thr	Glu	Leu	Ser	Met	G1 y	Glu	Leu	Leu	Met
		1315					1320					1325			
His	Ser	Thr	Val	Ser	Trp	Leu	Asn	Pro	Phe	Leu	Ser	Leu	Gly	Lys	Ala
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Arg Lys Asp Leu Glu Leu Thr Val Phe Val Phe Lys Arg Ala Val Ile 1345 1350 1355 1360 Leu Val Tyr Lys Glu Asn Cys

<210> 3252 <211> 238

<212> PRT

<213> Homo sapiens

<400> 3252

 Met 11e Ser Ser Tyr Leu Val Cys Leu Phe Thr Asp Thr 11e Arg Tyr

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 Leu Şer Leu His Asp Asn Lys Tyr I1e Arg Tyr Phe Pro Gly His Ser
 20
 25
 30

 Lys Arg Val Val Ala Leu Ser Met Ser Pro Val Asp Asp Thr Phe I1e
 35
 40
 45

 Ser Gly Ser Leu Asp Lys Thr I1e Arg Leu Trp Asp Leu Arg Ser Pro
 50
 55
 60

 Asp Cys Gln Gly Leu Met His Leu Gln Gly Lys Pro Val Cys Ser Phe

Asn Cys Gln Gly Leu Met His Leu Gln Gly Lys Pro Val Cys Ser Phe 65 70 75 80

Asp Pro Glu Gly Leu Ile Phe Ala Ala Gly Val Asn Ser Glu Met Val 85 90 95

Lys Leu Tyr Asp Leu Arg Ser Phe Asp Lys Gly Pro Phe Ala Thr Phe 100 105 110

Lys Met Gln Tyr Asp Arg Thr Cys Glu Trp Thr Gly Leu Lys Phe Ser 115 120 125

Asn Asp Gly Lys Leu Ile Leu Ile Ser Thr Asn Gly Ser Phe Ile Arg 130 135 140

Leu Ile Asp Ala Phe Lys Gly Val Val Met His Thr Phe Gly Gly Tyr 145 150 155 160

Ala Asn Ser Lys Ala Val Thr Leu Glu Ala Ser Phe Thr Pro Asp Ser 165 170 175

Gln Phe lle Met lle Gly Ser Glu Asp Gly Lys Ile His Val Trp Asn 180 185 190 ⟨210⟩ 3253

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3253

Met Gln Glu Ala Thr Leu Ser His Pro Arg Tyr Cys Pro His Thr Gln
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Ala Ala Ala Leu Asn lle Pro His Asn Lys Ala Lys Gly Ser Asp Lys
20 25 30

Ser Tyr Tyr Ser Gln Pro Ser His Leu Glu Thr Arg Gly Glu Thr Asn 35 40 45

Leu Pro Leu Asp Val Leu Arg Glu Arg Gln Asp Pro Gln Arg Asn Leu 50 55 60

Ser Glu Leu Ser Thr Cys Leu lle Gln Gln Asp Arg Asp Gly Arg Arg
65 70 75 80

Leu Ala Phe Ser Phe Ala Trp Val Ser Thr lle Leu Gln Gly Lys Leu 85 90 95

Cys Gly Gln Leu Gly Asn Thr Thr 11e Asn Trp Arg Gly Met Asn Asn 100 105 110

Arg Val Ser Gly Ala Val Cys

115

<210> 3254

<211> 881

<212> PRT

<213> Homo sapiens

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Arg	Gly	Gly	Gly	Gly	Gly	Ala	Trp	Glu	Leu	Gly	Ser	Asp	Ala	Arg	Pro
			20					25					30		
Ala	Phe	Gly	Gly	Gly	Val	Cys	Cys	Phe	Glu	His	Leu	Pro	Gly	Gly	Asp
		35					40					45			
Pro	Asp	Asp	Gly	Asp	Val	Pro	Leu	Ala	Leu	Leu	Arg	Gly	Glu	Pro	Gly
	50					55					60				
Leu	His	Leu	Ala	Pro	Gly	Thr	Asp	Asp	His	Asn	His	His	Leu	Ala	Leu
65					70					75					80
Asp	Pro	Cys	Leu	Ser	Asp	Glu	Asn	Tyr	Asp	Phe	Ser	Ser	Ala	Glu	Ser
				85					90					95	
Gly	Ser	Ser	Leu	Arg	Tyr	Tyr	Ser	G] u	Gly	Glu	Ser	Gly	G1 y	Gly	Gly
			100					105					110		
Gly	Gly		Ser	Leu	Ser	Leu		Pro	Pro	Gln	Gln		Pro	Leu	Val
		115					120					125	_		
Pro		Asn	Ser	Gly	Gly		Gly	Ala	Thr	G1 y		Ser	Pro	Gly	Glu
	130					135					140				
	Lys	Arg	Thr	Arg		GLy	Gly	Pro	Ala		Arg	His	Arg	Tyr	
145		mi	0.1	,	150	10	0.1	0.1	,, ,	155	Tr.	D)	TD.	,	160
Vai	Val	Ihr	6]11		GTY	Pro	Glu	61 u		Arg	Trp	Phe	Tyr		Glu
4	1	1	ть	165	1	D	DI	т1	170	т	Δ	C	1	175	71.
Asp	Lys	Lys		irp	Lys	rro	Pne		GIY	lyr	Asp	ser	Leu	Arg	116
C1	Lou	110	180	Ana	Tha	Lou	Lon	185	The	The	C1 _w	A10	190	Dno	Cl _n
61u	Leu	195	rne	Arg	1111	Leu	200	GIH	Imr	1111	GIY	=	Arg	110	GIII
Clv	Clv		Arra	Acn	Cly	Acn		Val	Cvc	Sor	Pro	205	G] y	Pro	Λ1 ₀
Uly	210	usb	AI g	ush	Ory	215	1112	vai	Cys	361	220	1 111	Oly	110	ліа
Ser		Ser	Glv	Glu	Asn		Asn	Glu	Asn	Arø		Cvs	Gly	Phe	Cvs
225	561	001	OI,	010	230	пор	пор	010	пор	235	7110	Cyb	01,	1 110	240
	Ser	Thr	Thr	Glv		Glu	Pro	Glu	Met		Glu	Leu	Val	Asn	
- • • •				245					250	<i></i> •				255	
Glu	Pro	Val	Cys		Arg	G1 v	Glv	Leu		Glu	Va]	Asp	Val		Gln
			260		.,	•	•	265	•			•	270		

Gly	Glu	Cys	Tyr	Pro	Val	Tyr		Asn	Gln	Ala	Asp		He	Pro	Val
		275					280					285			
Met		Gly	G1n	Trp	Phe	He	Asp	Gl y	Thr	Trp	G1n	Pro	Leu	Glu	Glu
	290					295					300				
Glu	Glu	Ser	Asn	Leu	lle	Glu	Gln	Glu	His		Asn	Cys	Phe	Arg	Gly
305					310					315					320
Gln	Gln	Met	Gln	Glu	Asn	Phe	Asp	He	Glu	Val	Ser	Lys	Ser	He	Asp
				325					330					335	
Gly	Lys	Asp	Gly	Ser	Gly	He	Asn	Tyr	Ser	Ala	Val	His	Ser	Phe	Lys
			340					345					350		
Leu	Ser	Arg	Asn	His	Val	Asp	Trp	His	Ser	Va]	Asp	Glu	Val	Tyr	Leu
		355					360					365			
Tyr	Ser	Asp	Ala	Thr	Thr	Ser	Lys	Пе	Ala	۸rg	Thr	Val	Thr	Gln	Lys
	370					375					380				
Leu	Gly	Phe	Ser	Lys	Ala	Ser	Ser	Ser	G1 y	Thr	Arg	Leu	His	Arg	Gly
385					390					395					400
Tyr	Val	Glu	Glu	Ala	Thr	Leu	Glu	Asp	Lys	Pro	Ser	Gln	Thr	Thr	His
				405					410					415	
He	Val	Phe	Val	Val	His	Gly	He	Gly	Gln	Lys	Met	Asp	Gln	Gly	Arg
			420					425					430		
He	He	Lys	Asn	Thr	Ala	Met	Met	Arg	Glu	Ala	Ala	Arg	Lys	He	Glu
		435					440					445			
Glu	Arg	His	Phe	Ser	Asn	His	Ala	Thr	His	Va]	Glu	Phe	Leu	Pro	Val
	450					455					460				
G]u	Trp	Arg	Ser	Lys	Leu	Thr	Leu	Asp	Gly	Asp	Thr	Val	Asp	Ser	lle
465					470					475					480
Thr	Pro	Asp	Lys	Val	Arg	Gly	Leu	Arg	Asp	Met	Leu	Asn	Ser	Ser	Ala
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Met	Asp	He	Met	Tyr	Tyr	Thr	Ser	Pro	Leu	Tyr	Arg	Asp	Glu	Leu	Val
			500					505					510		
Lys	Gly	Leu	G1n	Gln	Glu	Leu	Asn	Arg	Leu	Tyr	Ser	Leu	Phe	Cys	Ser
		515					520					525			
Arg	Asn	Pro	Asp	Phe	Glu	Glu	Lys	GLy	Gly	Lys	Val	Ser	He	Val	Ser
	530					535					540				
His	Ser	Leu	Gly	Cys	Val	He	Thr	Tyr	Asp	He	Met	Thr	Gly	Trp	
545					550					555					560

Pro	Val	Arg	Leu	Tyr 565	Glu	GIn	Leu	Leu	G1n 570	Lys	61u	Glu	GJu	Leu 575	Pro
Aan	Clu	Ama	Tun		Sor	Tyr	Glu	Clu		Hic	Lou	Lou	Acn		Lou
nsp	oju	AIg	580	Met	361	lyl	Giu	585	AI g	111.5	Leu	Leu	590	Olu	Leu
Tvr	lle	Thr	Lvs	Arg	Arg	Leu	Lys	Glu	He	Glu	G] u	Arg	Leu	llis	Glv
.,.		595	,		Ü		600					605			
Leu	Lvs	Ala	Ser	Ser	Met	Thr	Gln	Thr	Pro	Ala	Leu	Lys	Phe	Lvs	Val
	610					615					620	-			
Glu		Phe	Phe	Cys	Met	Gly	Ser	Pro	Leu	Ala	Val	Phe	Leu	Ala	Leu
625					630					635					640
Arg	Gly	lle	۸rg	Pro	Gly	Asn	Thr	Gly	Ser	Gln	Asp	His	Пе	Leu	Pro
				645					650					655	
Arg	G1u	lle	Cys	Asn	Arg	Leu	Leu	Asn]]e	Phe	His	Pro	Thr	Asp	Pro
			660					665					670		
Val	Ala	Tyr	Arg	Leu	Glu	Pro	Leu	11e	Leu	Lys	His	Tyr	Ser	Asn	He
		675					680					685			
Ser	Pro	Val	Gln	lle	llis	Trp	Tyr	Asn	Thr	Ser	Asn	Pro	Leu	Pro	Tyr
	690					695					700				
Glu	His	Met	Lys	Pro	Ser	Phe	Leu	Asn	Pro	Ala	Lys	Glu	Pro	Thr	Ser
705					710					715					720
Val	Ser	Glu	Asn	Glu	Gly	He	Ser	Thr	lle	Pro	Ser	Pro	Val	Thr	Ser
				725					730					735	
Pro	Val	Leu	Ser	Arg	Arg	His	Tyr	G1 y	Glu	Ser	He	Thr	Asn	He	Gly
			740					745					750		
Lys	Ala	Ser	11e	Leu	Gly	Ala	Ala	Ser	He	Gly	Lys	Gly	Leu	Gly	Gly
		755					760					765			
Met	Leu	Phe	Ser	Arg	Phe	G1 y	Arg	Ser	Ser	Thr		Gln	Ser	Ser	Glu
	770					775					780				
	Ser	Lys	Asp	Ser		G]u	Asp	Glu	Lys		Pro	Va]	Ala	Ser	
785					790					795			_		800
Ser	Ala	Thr	Thr		Gly	Thr	Gln	Thr		Pro	His	Ser	Ser		GIv
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Phe	Leu	Asp		Ala	Leu	61u	Leu		HIS	Arg	116	Asp		ыu	Leu
Λ	C1	C1.	820	V ≈ 1	C1	C	Δ	825	Т	C ~ ·-	م A 1	Vert	830	Co.	n: ~
Arg	GIU		Leu	val	61U	ser	Arg	ıyr	ırp	ser	ига		inr	ser	1118
		835					840					845			

 Thr
 A1a
 Tyr
 Trp
 Ser
 Ser
 Leu
 Asp
 Val
 A1a
 Leu
 Phe
 Leu
 Leu
 Thr
 Phe

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<210> 3255

<211> 141

<212> PRT

<213> Homo sapiens

⟨400⟩ 3255

Met Cys Ala Trp Met 11e Asp Ser Phe Gly Asn Glu Glu Gln Arg His

1 5 10 15

Lys Phe Cys Pro Pro Leu Cys Thr Met Glu Lys Phe Ala Ser Tyr Cys 20 25 30

Leu Thr Glu Pro Gly Ser Gly Ser Asp Ala Ala Ser Leu Leu Thr Ser 35 40 45

Ala Lys Lys Gln Gly Asp His Tyr Ile Leu Asn Gly Ser Lys Ala Phe 50 55 60

lle Ser Gly Ala Gly Glu Ser Asp lle Tyr Val Val Met Cys Arg Thr
65 70 75 80

Gly Gly Pro Gly Pro Lys Gly Ile Ser Cys Ile Val Val Glu Lys Gly 85 90 95

Thr Pro Gly Leu Ser Phe Gly Lys Lys Glu Lys Lys Val Ser Gly Cys 100 105 110

Trp Thr Gly Asn Asn Ser Gly Tyr Glu Thr Leu Pro Pro Ala Ser Pro
115 120 125

Thr Pro Ala Leu Phe Gln Lys Thr Gly Leu His Thr Cys 130 135 140

<210> 3256

<211> 254

<212> PRT <213> Homo sapiens

⟨400⟩ 3256

Met	Ala	Ala	Val	Ala	Ala	Thr	Ala	Ala	Ala	Lys	Gly	Asn	Gly	Gly	Gly
1				5					10					15	
Gly	Gly	Arg	Ala	Gly	Ala	Gly	Asp	Ala	Ser	Gly	Thr	Arg	Lys	Lys	Lys
			20					25					30		
Gly	Pro	Gly	Pro	Leu	Ala	Thr	Ala	Tyr	Leu	Val	He	Tyr	Asn	Val	Val
		35					40					45			
Met	Thr	Ala	Gly	Trp	Leu	Val	Ile	Ala	Val	Gly	Leu	Val	Arg	Ala	Tyr
•	50					55					60				
Leu	Ala	Lys	Gly	Ser	Tyr	His	Ser	Leu	Tyr	Tyr	Ser	He	Glu	Lys	Pro
65					70					75					80
Leu	Lys	Phe	Phe	Gln	Thr	Gly	Ala	Leu	Leu	Glu	Ile	Leu	llis	Cys	Ala
				85					90					95	
Ile	Gly	lle	Val	Pro	Ser	Ser	Val	Val	Leu	Thr	Ser	Phe	Gln	Val	Met
			100					105					110		
Ser	Arg	Val	Phe	Leu	He	Trp	Ala	Val	Thr	His	Ser	Val	Lys	G]u	Val
		115					120					125			
G1n		Glu	Asp	Ser	Val	Leu	Leu	Phe	Val	Пе	Ala	Trp	Thr	He	Thr
	130					135					140				
	lle	lle	Arg	Tyr	Ser	Phe	Tyr	Thr	Phe	Ser	Leu	Leu	Asn	His	Leu
145					150					155					160
Pro	Tyr	Leu	lle		Trp	Ala	Arg	Tyr	Thr	Leu	Phe	lle	Val	Leu	Tyr
				165					170					175	
Pro	Met	Gly		Ser	Gly	Glu	Leu		Thr	He	Tyr	Ala	Ala	Leu	Pro
			180					185					190		
Phe	Val		GIn	Ala	Gly	Leu	Tyr	Ser	He	Ser	Leu		Asn	Lys	Tyr
		195					200					205			
Asn		Ser	Phe	Asp	Tyr		Ala	Phe	Leu	11e		Пе	Met	Пе	Ser
a.	210	Б		151		215					220				
	He	Pro	He	Phe		GIn	Leu	Tyr	Phe		Met	He	His	GIn	Arg
225					230					235					240

Arg Lys Ile Leu Ser His Thr Glu Glu His Lys Lys Phe Glu

245 250

<210> 3257

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3257

Met Leu Trp Ser Val Pro Gly Asp Arg Ala Ala Pro Gly His Pro Pro 1 5 10 15

Phe Arg Ser Glu Ala Ser His Pro Thr Gln Gly Pro Ser Thr Thr Ser 20 25 30

Pro Phe Ser Pro Phe Leu Gly Ala Asp Pro Gly Gly Ser lle Tyr Arg 35 40 45

Gly Val Pro Gly Ser Leu Thr Ala Gly Thr Thr Glu Ala Arg Lys Ser 50 55 60

Cys Leu Ala Pro Ala Gln Gly Thr Gln Gly Arg Leu Gly Ala Pro Ala 65 70 75 80

Gly Ser His Ser Pro Arg Gln Gly Leu Val Tyr Pro Cys Ala Met 85 90 . 95

Ser Val Ile Gly Leu Cys Ala Gly Ser Val Met Arg Ser Leu Pro Gly 100 105 110

Leu Pro Arg Pro Arg Arg

115

⟨210⟩ 3258

<211> 804

<212> PRT

<213> Homo sapiens

<400> 3258

Met Arg Pro Val Ala Leu Leu Leu Leu Pro Ser Leu Leu Ala Leu Leu

1 5 10 15

Ala His Gly Leu Ser Leu Glu Ala Pro Thr Val Gly Lys Gly Gln Ala

			20					25					30		
Pro	G1 y	Пe	Glu	Glu	Thr	Asp	Gly	Glu	Leu	Thr	Ala	Ala	Pro	Thr	Pro
		35					40					45			
Glu	Gln	Pro	Glu	Arg	Gly	Val	His	Phe	Val	Thr	Thr	Ala	Pro	Thr	Leu
	50					55					60				
Lys	Leu	Leu	Asn	His	His	Pro	Leu	Leu	Glu	Glu	Phe	Leu	Gln	Glu	Gly
65					70					75					80
Leu	Glu	Lys	G]y	Asp	Glu	Glu	Leu	Arg	Pro	Ala	Leu	Pro	Phe	Gln	Pro
				85					90					95	
Asp	Pro	Pro	Ala	Pro	Phe	Thr	Pro	Ser	Pro	Leu	Pro	Arg	Leu	Ala	Asn
			100					105					110		
G1n	Asp	Ser	Arg	Pro	Val	Phe	Thr	Ser	Pro	Thr	Pro	Ala	Met	Ala	Ala
		115					120					125			
Val	Pro	Thr	Gln	Pro	Gln	Ser	Lys	Glu	Gly	Pro	Trp	Ser	Pro	Glu	Ser
	130					135					140				
Glu	Ser	Pro	Met	Leu	Arg	lle	Thr	Ala	Pro	Leu	Pro	Pro	Gly	Pro	Ser
145					150					155					160
Met	Ala	Val	Pro		Leu	Gly	Pro	G1 y	Glu	He	Ala	Ser	Thr	Thr	Pro
				165					170					175	
Pro	Ser	Arg	Ala	Trp	Thr	Pro	Thr		Glu	Gly	Pro	Gly		Met	G1 y
			180					185					190		
Arg	Pro		Val	Ala	Glu	Val		Ser	Gln	Gly	Ala		He	Gly	He
	٠.	195			_		200	. 1		0.1		205	<i>C</i> 1	<i>a</i> 1	T)
G1n		Thr	He	Thr	Ser		Thr	Ala	Ser	Gly		Asp	Glu	Glu	Ihr
m)	210	TI	T.I.	(P)		215	T.I	TI	TI	7.1	220	TI	17 . 3	C1	ть
	Ihr	Inr	Ihr	Ihr	lle	11e	Inr	Inr	ınr		ınr	Inr	vaı	GIN	
225	C1	D	C	C	230	Α	DI	C	C1	235 Date:	C1	C1	C	1	240
rro	61 y	Pro	Cys		Trp	ASII	rne	261.	250	rro	GIU	GIŅ	261	255	ASP
Can	Dro	The	Acn	245	Ser	Sor	Dro	The		Vo.1	Clv	Lou	Acn		Pho
ser	110	1111	260	Leu	Ser	261	110	265	nsp	vai	Oly	Leu	270	Cys	rne
Dha	Tur	116		Val	Tyr	Pro	Clv		Glv	Val	Glu	Ha		Val	Gln
1 116	1 y 1	275	261	101	ıyı	110	280	ı yı	OIÀ	101	oru	285	rìo	101	0111
Aen	ما		Len	Aro	Glu	GLv		The	Val	Thr	Val		Glv	len	Glv
11311	290	501	Lou	, 112 g	Jiu	295	Jiu	. 111			300	V 1 U	U1,	u	0.,
Glv		Asp	Pro	Геп	Pro		Ala	Asp	Gln	Ser		Leu	Leu	Arg	G1v

305					310					315					320
Gln	Va]	He	Arg	Ser	Pro	Thr	His	Gln	Ala	Ala	Leu	Arg	Phe	Gln	Ser
				325					330					335	
Leu	Pro	Pro	Pro	Ala	Gly	Pro	Gly	Thr	Phe	His	Phe	His	Tyr	Gln	Ala
			340					345					350		
Tyr	Leu	Leu	Ser	Cys	His	Phe	Pro	Arg	Arg	Pro	Ala	Tyr	Gly	Asp	Val
		355					360					365			
Thr	Val	Thr	Ser	Leu	His	Pro	Gly	Gly	Ser	Ala	Arg	Phe	His	Cys	Ala
	370					375					380				
Thr	Gly	Tyr	Gln	Leu	Lys	Gly	Ala	Arg	His	Leu	Thr	Cys	Leu	Asn	Ala
385					390					395					400
Thr	Gln	Pro	Phe	Trp	Asp	Ser	Lys	Glu	Pro	Va]	Cys	He	Ala	Ala	Cys
				405					410					415	
Gly	Gly	Val	He	Arg	Asn	Ala	Thr	Thr	Gly	Arg	He	Val	Ser	Pro	Gly
			420					425					430		
Phe	Pro	Gly	Asn	Tyr	Ser	Asn	Asn	Leu	Thr	Cys	His	Trp	Leu	Leu	Glu
		435					440					445			
Ala	Pro	Glu	Gly	Gln	Arg	Leu	His	Leu	His	Phe	Glu	Lys	Val	Ser	Leu
	450					455					460				
Ala	Glu	Asp	Asp	Asp	Arg	Leu	He	lle	Arg	Asn	Gly	Asp	Asn	Val	Glu
465					470					475					480
Ala	Pro	Pro	Val	Tyr	Asp	Ser	Tyr	Glu	Val	Glu	Tyr	Leu	Pro	Пe	Glu
				485					490					495	
Gly	Leu	Leu	Ser	Ser	Gly	Lys	His	Phe	Phe	Val	G]u	Leu	Ser	Thr	Asp
			500					505					510		
Ser	Ser	Gly	Ala	Ala	Ala	Gly		Ala	Leu	Arg	Tyr		Ala	Phe	Gln
		515					520					525			
Gln		His	Cys	Tyr	Glu	Pro	Phe	Val	Lys	Tyr	Gly	Asn	Phe	Ser	Ser
_	530	_		_		535					540				
	Thr	Pro	Thr	Tyr		Val	Gly	Thr	Thr		Glu	Phe	Ser	Cys	
545	6.1		 .	_	550			_		555					560
Pro	GIy	Tyr	Thr		GIu	Gln	Gly	Ser		He	He	Glu	Cys		Asp
D			D	565	ar.		0.7	an:	570	15				575	
Pro	HIS	Asp		GIn	Irp	Asn	GJu		Glu	Pro	Ala	Cys		Ala	Val
C.:-	C	C1	580	11	TL	Α.	C	585	C1	V . 1	17 -1		590	D	
LVS	ser	UIV	UH	116	ınr	Asn	Ser	ALA	LIV	val	val	Len	Ser	17170	Asn

		595					600					605			
Trp	Pro	Glu	Pro	Tyr	Gly	Arg	Gly	G1n	Asp	Cys	lle	Trp	G1 y	Val	His
	610					615					620				
Val	Glu	Glu	Asp	Lys	Arg	He	Met	Leu	Asp	He	Arg	Val	Leu	Arg	lle
625					630					635					640
G1 y	Pro	Gly	Asp	Val	Leu	Thr	Phe	Tyr	Asp	G1 y	Лsp	Asp	Leu	Thr	Ala
				645					650					655	
Arg	Val	Leu	Gly	Gln	Tyr	Ser	Gly	Pro	Arg	Ser	His	Phe	Lys	Leu	Phe
			660					665					670		
Thr	Ser	Met	Ala	Asp	Val	Thr	Ile	Gln	Phe	Gln	Ser	Asp	Pro	Gly	Thr
		675					680					685			
Ser	Val	Leu	Gly	Tyr	Gln	Gln	Gly	Phe	Val	11e	His	Phe	Phe	Glu	Val
	690					695					700				
Pro	Arg	Asn	Asp	Thr	Cys	Pro	Glu	Leu	Pro	Glu	11e	Pro	Asn	Gly	Trp
705					710					715					720
Lys	Ser	Pro	Ser	Gln	Pro	Glu	Leu	Val	His	Gly	Thr	Val	Val	Thr	Tyr
				725					730					735	
Gln	Cys	Tyr	Pro	Gly	Tyr	Gln	Val	Val	Gly	Ser	Ser	Val	Leu	Met	Cys
			740					745					750		
Gln	Trp	Asp	Leu	Thr	Trp	Ser	Glu	Asp	Leu	Pro	Ser	Cys	Gln	Arg	Val
		755					760					765			
Thr	Ser	Cys	His	Asp	Pro	Gly	Asp	Val	Glu	His	Ser	Arg	Arg	Pro	Tyr
	770					775					780				
Pro	Ala	Pro	Ser	Phe	Pro	Trp	Gly	Pro	Pro	Cys	Asn	lle	Ser	Val	
785					790					795					800
Arg	Val	Leu	Cys												

<211> 327

<212> PRT

<213> Homo sapiens

<400> 3259

Met Ala Glu Ala Gln Ser Gly Thr Gly Gln Leu Gln Glu Gln Lys Lys

1				5					10					15	
Gly	Leu	Leu	He	Ala	Val	Ser	Val	Ser	Val	۸sp	Lys	Пе	lle	Ser	His
			20					25					30		
Phe	Gly	Ala	Ala	Arg	Asn	Leu	Val	Gln	Lys	Ala	Gln	Leu	Gly	Asp	Ser
		35					40					45			
Arg	Leu	Ser	Pro	Asp	Val	Gly	His	Leu	Val	Leu	Thr	Thr	Leu	Cys	Pro
	50					55					60				
Ala	Leu	His	Ala	Leu	Val	Ala	Asp	Gly	Leu	Lys	Pro	Phe	Arg	Lys	Asp
65					70					75					80
Leu	He	Thr	Gly	Gln	Arg	Arg	Ser	Ser	Pro	Trp	Ser	Val	Val	Glu	Ala
				85					90					95	
Ser	Val	Lys	Pro	Gly	Ser	Ser	Thr	Arg	Ser	Leu	Gly	Thr	Leu	Tyr	Ser
			100					105					110		
Gln	Val	Ser	Arg	Leu	Ala	Pro	Leu	Ser	Ser	Ser	Arg	Ser	Arg	Phe	His
		115					120					125			
Ala	Phe	He	Leu	Gly	Leu	Leu	Asn	Thr	Lys	Gln	Leu	Glu	Leu	Trp	Phe
	130					135					140				
Ser	Ser	Leu	Gln	Glu	Asp	Ala	Gly	Ser	Trp	Trp	Glu	Gln	Leu	Thr	Gln
145					150					155					160
Ala	Ser	Arg	Val	Tyr	Ala	Ser	Gly	Gly	Thr	Glu	Gly	Phe	Pro	Leu	Ser
				165					170					175	
Arg	Trp	Ala	Pro	Gly	Arg	His	Gly	Thr	Ala	Ala	Glu	Glu	Gly	Ala	Gln
			180					185					190		
Glu	Arg	Pro	Leu	Pro	Thr	Asp	Glu	Met	Ala	Pro	Gly	Arg	Gly	Leu	Trp
		195					200					205			
Leu	Gly	Arg	Leu	Phe	Gly	Val	Pro	Gly	Gly	Pro	Ala	Glu	Asn	Glu	Asn
	210					215					220				
Gly	Ala	Leu	Lys	Ser	Arg	Arg	Pro	Ser	Ser	Trp	Leu	Pro	Pro	Thr	Val
225					230					235					240
Ser	Val	Leu	Ala	Leu	Val	Lys	Arg	Gly	Ala	Pro	Pro	Glu	Met	Pro	Ser
				245					250					255	
Pro	Gln	Glu		Glu	Ala	Ser	Ala	Pro	Arg	Met	Val	Gln	Thr	His	Arg
			260					265					270		
Ala	Val		Ala	Leu	Cys	Asp		Thr	Ala	Ala	Arg		Asp	Gln	Leu
		275					280					285			
Ser	Phe	Arg	Arg	G I y	Glu	Val	Leu	Arg	Val	11e	Thr	Thr	Va]	Asp	Glu

295 300 290 Asp Trp Leu Arg Cys Gly Arg Asp Gly Met Glu Gly Leu Val Pro Val 320 305 310 Gly Tyr Thr Ser Leu Val Leu 325 <210> 3260 <211> 1076 <212> PRT <213> Homo sapiens <400> 3260 Met Gly 11e Leu Ser 11e Thr Asp Gln Pro Pro Leu Val Gln Ala 11e 5 Phe Ser Arg Asp Val Glu Glu Val Arg Ser Leu Leu Ser Gln Lys Glu 25 Asn Ile Asn Val Leu Asp Gln Glu Arg Arg Thr Pro Leu His Ala Ala

45 35 40 Ala Tyr Val Gly Asp Val Pro lle Leu Gln Leu Leu Leu Met Ser Gly 55 Ala Asn Val Asn Ala Lys Asp Thr Leu Trp Leu Thr Pro Leu His Arg 70 65 Ala Ala Ala Ser Arg Asn Glu Lys Val Leu Gly Leu Leu Leu Ala His 90 Ser Ala Asp Val Asn Ala Arg Asp Lys Leu Trp Gln Thr Pro Leu His 105 Val Ala Ala Asn Arg Ala Thr Lys Cys Ala Glu Ala Leu Ala Pro 120 125 115 Leu Leu Ser Ser Leu Asn Val Ala Asp Arg Ser Gly Arg Ser Ala Leu 135 His His Ala Val His Ser Gly His Leu Glu Thr Val Asn Leu Leu Leu 150 155 160 145 Asn Lys Gly Ala Ser Leu Asn Val Cys Asp Lys Lys Glu Arg Gln Pro

165 170

Leu His Trp Ala Ala Phe Leu Gly His Leu Glu Val Leu Lys Leu Leu

			180					185					190		
Val	Ala	Arg	Gly	Ala	Asp	Leu	Gly	Cys	Lys	Asp	Arg	Lys	G]y	Tyr	Gly
		195					200					205			
Leu	Leu	His	Thr	Λla	Ala	Ala	Ser	Gly	Gln	11e	Glu	Val	Val	Lys	Tyr
	210					215					220				
Leu	Leu	Arg	Met	Gly	Ala	Glu	11e	Asp	Glu	Pro	Asn	Ala	Phe	Gly	Asn
225					230					235					240
Thr	Ala	Leu	His	lle	Ala	Cys	Tyr	Leu	Gly	G1n	Asp	Ala	Val	Ala	He
				245					250					255	
Glu	Leu	Val	Asn	Ala	Gly	Ala	Asn	Val	Asn	Gln	Pro	Asn	Asp	Lys	Gly
			260					265					270		
Phe	Thr	Pro	Leu	His	Va]	Ala	Ala	Va1	Ser	Thr	Asn	Gly	Ala	Leu	Cys
		275					280					285			
Leu	Glu	Leu	Leu	Val	Asn	Asn	Gly	Ala	Asp	Val	Asn	Tyr	Gln	Ser	Lys
	290					295					300				
Glu	Gly	Lys	Ser	Pro	Leu	His	Met	Ala	Ala	lle	His	Gly	Arg	Phe	Thr
305					310					315					320
Arg	Ser	Gln	lle	Leu	He	Gln	Asn	Gly	Ser	Glu	Ile	Asp	Cys	Ala	Asp
				325					330					335	
Lys	Phe	Gly	Asn	Thr	Pro	Leu	His	Val	Ala	Ala	Arg	Tyr	Gly	His	Glu
			340					345					350		
Leu	Leu	He	Ser	Thr	Leu	Met	Thr	Asn	Gly	Ala	Asp	Thr	Ala	Arg	Arg
		355					360					365			
G1 y	He	His	Asp	Met	Phe	Pro	Leu	His	Leu	Ala		Leu	Phe	Gly	Phe
	370					375					380				
Ser	Asp	Cys	Cys	Arg	Lys	Leu	Leu	Ser	Ser		Gln	Leu	Tyr	Ser	
385					390					395					400
Val	Ser	Ser	Leu		Asn	Glu	His	Val		Ser	Ala	Gly	Phe		lle
				405					410					415	_
Asn	Thr	Pro		Asn	Leu	Gly	Arg		Cys	Leu	His	Ala		Ala	Ser
			420					425					430		
Gly	Gly		Val	Glu	Cys	Leu		Leu	Leu	Leu	Ser		Gly	Ala	Asp
		435			,	D.	440		Tr.	D	,	445	т	4.1	A 7
Leu		Arg	Arg	Asp	Lys			Arg	Ihr	Pro			ıyr	Ala	Ala
A 7 -	450	C1	C	Т	C1=	455		V~1	Th	Lau	460		A16	G1 v	Ala
14 1 2	ASI	1111	T⊕ F	ivr	TO LOT	LVS	11 11 11	va I	1111	1.5711	val	1111	1111	V LU	nia

465					470					475					480
Gly	Val	Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala
				485					490					495	
Ala	Ala	Ser	Asp	Thr	Tyr	Arg	Arg	Ala	Glu	Pro	His	Thr	Pro	Ser	Ser
			500					505					510		
His	Asp	Ala	Glu	Glu	Asp	Glu	Pro	Leu	Lys	Glu	Ser	Arg	Arg	Lys	Glu
		515					520					525			
Ala	Phe	Phe	Cys	Leu	Glu	Phe	Leu	Leu	Asp	Asn	Gly	Ala	Asp	Pro	Ser
	530					535					540				
Leu	Arg	Asp	Arg	Gln	Gly	Tyr	Thr	Ala	Val	His	Tyr	Ala	Ala	Ala	Tyr
545					550					555					560
Gly	Asn	Arg	Gln	Asn	Leu	Glu	Leu	Leu	Leu	Glu	Met	Ser	Phe	Asn	Cys
				565					570					575	
Leu	Glu	Asp	Val	Glu	Ser	Tha	He	Pro	Val	Ser	P.ro	Leu	His	Leu	Ala
			580					585					590		
Ala	Tyr	Asn	Gly	His	Cys	Glu	Ala	Leu	Lys	Thr	Leu	Ala	Glu	Thr	Leu
		595					600					605			
Val	Asn	Leu	Asp	Val	Arg	Asp	His	Lys	Gly	Arg	Thr	Ala	Leu	Phe	Leu
	610					615					620				
Ala	Thr	G] u	Arg	Gly	Ser	Thr	Glu	Cys	Val	Glu	Val	Leu	Thr	Ala	llis
625					630					635					640
Gly	Ala	Ser	Ala	Leu	He	Lys	Glu	Arg	Lys	Arg	Lys	Trp	Thr	Pro	Leu
				645					650					655	
His	Ala	Ala	Ala	Ala	Ser	Gly	llis	Thr	Asp	Ser	Leu	His	Leu	Leu	Пe
			660					665					670		
Asp	Ser	Gly.	Glu	Arg	Ala	Asp	He	Thr	Asp	Val	Met	Asp	Ala	Tyr	Gly
		675					680					685			
Gln	Thr	Pro	Leu	Met	Leu	Ala	lle	Met	Asn	Gly	His	Va]	Asp	Cys	Val
	690					695					700				
His	Leu	Leu	Leu	Glu	Lys	G] y	Ser	Thr	Ala	Asp	Ala	Ala	Asp	Leu	Arg
705					710					715					720
Gly	Arg	Thr	Ala	Leu	His	Arg	Gly	Ala	Val	Thr	Gly	Cys	Glu	Asp	Cys
				725					730					735	
Leu	Ala	Ala	Leu	Leu	Asp	llis	Asp	Ala	Phe	Val	Leu	Cys	Arg	Asp	Phe
			740					745					750		
Lys	Gly	Arg	Thr	Pro	lle	His	Leu	Ala	Ser	Ala	Cys	Gly	His	Thr	Ala

		755					760					765			
Val	Leu	Arg	Thr	Leu	Leu	Gln	Ala	Ala	Leu	Ser	Thr	Asp	Pro	Leu	Asp
	770					775					780				
Ala	Gly	Val	Asp	Tyr	Ser	Gly	Tyr	Ser	Pro	Met	His	Trp	Ala	Ser	Tyr
785					790					795					800
Thr	Gly	Arg	Glu	Asp	Cys	Leu	Glu	Leu	Leu	Leu	Glu	His	Ser	Pro	Phe
				805					810					815	
Ser	Tyr	Leu	Glu	Gly	Asn	Pro	Phe	Thr	Pro	Leu	His	Cys	Ala	Val	He
			820					825					830		
Asn	Asn	Gln	Asp	Ser	Thr	Thr	Glu	Met	Leu	Leu	Gly	Ala	Leu	Gly	Ala
		835					840					845			
Lys	Пе	Val	Asn	Ser	Arg	Asp	Ala	Lys	Gly	Arg	Thr	Pro	Leu	His	Ala
	850					855					860				
Ala	Ala	Phe	Ala	Asp	Asn	Val	Ser	Gly	Leu	Arg	Met	Leu	Leu	Gln	His
865					870					875					880
Gln	Ala	Glu	Val	Asn	Ala	Thr	Asp	His	Thr	Gly	Arg	Thr	Ala	Leu	Met
				885					890					895	
Thr	Ala	Ala	Glu	Asn	Gly	Gln	Thr	Ala	Ala	Val	Glu	Phe	Leu	Leu	Tyr
			900					905					910		
Arg	Gly	Lys	Ala	Asp	Leu	Thr	Val	Leu	Asp	Glu	Asn	Lys	Asn	Thr	Ala
		915					920					925			
Leu	llis	Leu	Ala	Cys	Ser	Lys	Gly	His	Glu	Lys	Cys	Ala	Leu	Met	He
	930					935					940				
	Ala	Glu	Thr	Gln		Leu	Gly	Leu	He	Asn	Ala	Thr	Asn	Ser	Ala
945					950					955					960
Leu	G1n	Met	Pro		His	lle	Ala	Ala		Asn	Gly	Leu	Ala	Ser	Val
				965					970					975	
Val	Gln	Ala		Leu	Ser	His	Gly		Thr	Va]	Leu	Ala		Asp	Glu
			980					985					990		
Glu	GI y		Thr	Pro	Ala			Cys	Ala	Pro			Asp	Val	Ala
		995					1000	m				1005		Б	
		Leu	Ala	Leu			Ser	Ihr	Met			Phe	Pro	Pro	Lys
	1010	V. 1	C	D		1015	DI	C	1		1020	Λ	Cres	C	т1.
		164	ser			ser	rne	ser			Lys	nsn	cys	Ser	
102	J				1030					1035					1040

```
Ala Ala Ala Lys Thr Val Gly Gly Cys Gly Ala Leu Pro His Gly Ala
1045

Ser Cys Pro Tyr Ser Gln Glu Arg Pro Gly Ala Ile Gly Leu Asp Gly
1060

1075

Cys Tyr Ser Glu
1075
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<211> 124

<212> PRT

<213> Homo sapiens

<400> 3261

Met His Ser Pro Arg Thr Gln 11e 11e Trp Phe Cys Phe Thr Lys Ser 1 5 10 15

Lys Cys Ser Thr Cys 11e Ser Leu Phe Gln Thr Glu Met Ala I1e Lys
20 25 30

His Val Phe Gln Lys Val Phe Ala Gly Glu Lys Met Arg Lys Val Lys
35 40 45

Glu Ser Phe Pro Asp Pro Asp Leu Arg Arg Lys Gly Glu Asp Thr Phe
50 55 60

Cys Phe Val Ala Tyr Leu Leu Trp Ala Lys Ser Tyr Tyr Cys Leu Arg
65 70 75 80

Glu Val Arg Leu Thr Leu Ala His Pro Trp Gly Ile Ser Cys Ala Cys 85 90 95

Gly Gly Glu Thr Asn Gln Val Gly Asn Asn Ser Phe Ser Pro Tyr Leu 100 105 110

Ser Ser Phe His Val Leu Leu Trp Asn Lys Ser Asp 115 120

<210> 3262

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3262 Met Val Leu Leu Leu Phe Cys Cys Cys Leu Arg Arg Ser Phe Val Leu 5 10 Val Ala Leu Val Ala Gln Ala Gly Val Gln Trp Arg Asp Leu Ser Ser 25 Pro Gln Pro Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu 35 40 45 Pro Ser Ser Trp Asp Tyr Arg His Val Pro Pro Pro His Pro Ala Asn 55 60 Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Asp Gln Ala Gly 75 Leu Glu Pro Pro Thr Ser Gly Val Pro Pro Thr Ser Ala Phe Gln Ser 85 90 Ala Gly Ile Thr Gly Met Ser His Pro Ala Asn Glu Trp Phe Leu Lys 100 105 110 Gln Lys Ser Gln 115 <210> 3263 <211> 115 <212> PRT <213> Homo sapiens <400> 3263 Met Gly Met Leu Ser Leu Gly Glu Pro Glu Lys Ala Ser Leu Arg Arg 1 5 10 Gln Pro Glu Gly Gly Glu Asp Asn Val Lys Lys Glu Pro Val Thr Ala 25 Gln Cys Pro Gly Gly Val Gly Val Ser Arg Lys His Ser Arg Gln Arg 40 45Glu Glu Lys Tyr Arg Gly Arg Thr Ala Val Glu His Leu Gln Glu lle 50 60 55

Leu Cys Gly Trp Thr Thr Ala Gln Gly Lys Arg Gly Thr Ser Gly Gly

75

70

```
Arg His Glu Val Gly Lys Glu Met Ala Arg Arg Ser Gln Gly Phe Val
                                     90
Gly Tyr Ser Gly Val Asn Gly Arg Arg Gln Ala Thr Phe Ser Leu Leu
            100
                                 105
                                                     110
lle Ser Phe
        115
<210> 3264
<211> 244
<212> PRT
<213> Homo sapiens
<400> 3264
Met Ala Pro Ser Ser Glu Ser Ser Val Pro Ser His Ser Met Ser Ser
                                     10
Arg Arg Asp Thr Asp Ser Asp Thr Gln Asp Ala Asn Asp Ser Ser Cys
             20
                                 25
                                                      30
Lys Ser Ser Glu Arg Ser Leu Pro Asp Cys Thr Leu His Pro Asn Ser
                             40
                                                  45
lle Ser lle Asp Ala Gly Pro Arg Gln Ala Pro Lys lle Ala Gln lle
                         55
Lys Arg Asn Leu Ser Tyr Gly Asp Asn Ser Asp Pro Ala Leu Glu Ala
                     70
                                          75
                                                              80
Ser Ser Leu Pro Pro Pro Asp Pro Trp Leu Glu Thr Ser Ser Ser Ser
                 85
                                     90
Pro Ala Glu Pro Ala Gln Pro Gly Ala Cys Arg Arg Asp Gly Tyr Trp
            100
                                 105
                                                     110
Phe Leu Lys Leu Gln Ala Glu Thr Glu Arg Leu Glu Gly Trp Cys
                            120
Cys Gln Met Asp Lys Glu Thr Lys Glu Asn Asn Leu Ser Glu Glu Val
                                            140
                        135
Leu Gly Lys Val Leu Ser Ala Val Gly Ser Ala Gln Leu Leu Met Ser
145
                    150
                                         155
                                                             160
```

Gln Lys Phe Gln Gln Phe Arg Gly Leu Cys Glu Gln Asn Leu Asn Pro

Asp Ala Asn Pro Arg Pro Thr Ala Gln Asp Leu Ala Gly Phe Trp Asp Leu Leu Gln Leu Ser Ile Glu Asp Ile Ser Met Lys Phe Asp Glu Leu Tyr His Leu Lys Ala Asn Ser Trp Gln Leu Val Glu Thr Pro Glu Lys Arg Lys Val Ser Met Glu Gln Cys Gly Gly Glu Val Gln Gly Gln lle Pro Gly Arg Gln

<210> 3265

<211> 817

<212> PRT

<213> Homo sapiens

<400> 3265

Met Thr Ser Ala Ala His Ser Glu Asn Tyr Ser Pro Ala Ser Met Val Thr Glu Val Leu Trp lle Leu Ser Asp Gln Lys Glu Cys Ala Val Glu Cys Leu Tyr Asn Asn lle Val lle Glu Thr Leu Leu Gln Pro lle His Asn Leu Met Lys Gly Asn Glu Ala Ser Pro Asn Cys Ser Glu Thr Ala Leu Ile His 11e Ala Gly Ile Leu Val Arg 11e Ala Ser Val Glu Glu Gly Leu Ile Leu Leu Tyr Gly Ala Asn Met Asn Ser Ser Glu Glu Ser Pro Thr Gly Ala His Ile 11e Ala Gln Phe Ser Lys Lys Leu Leu Asp Glu Asp IIe Ser IIe Phe Ser Gly Ser Glu Met Leu Pro Val Val

Lys Gly Ala Phe lle Ser Val Cys Arg His Ile Tyr Ser Thr Cys Glu

Gry	Leu	OID	val	Leu	116	1111	ı y I	usii	Leu	mrs	oru	261	116	ATA	LyS
145					150					155					160
Ala	Trp	Lys	Lys	Thr	Ser	Leu	Leu	Ser	Glu	Arg	lle	Pro	Thr	Pro	Val
				165					170					175	
Glu	Gly	Ser	Asp	Ser	Val	Ser	Ser	Val	Ser	GIn	Glu	Ser	Gln	Asn	He
			180					185					190		
Met	Ala	Trp	Glu	Asp	Asn	Leu	Leu	Asp	Asp	Leu	Leu	His	Phe	Ala	Ala
		195					200					205			
Thr	Pro	Lys	Gly	Leu	Leu	Leu	Leu	Gln	Arg	Thr	Gly	Ala	He	Asn	Glu
	210					215					220				
Cys	Val	Thr	Phe	He	Phe	Asn	Arg	Tyr	Ala	Lys	Lys	Leu	Gln	Val	Ser
225					230					235					240
Arg	His	Lys	Lys	Phe	Gly	Tyr	Gly	Val	Leu	Val	Thr	Arg	Val	Ala	Ser
				245					250					255	
Thr	Ala	Ala	Gly	Gly	He	Ala	Leu	Lys	Lys	Ser	Gly	Phe	lle	Asn	Glu
			260					265					270		
Leu	Ile	Thr	Glu	Leu	Trp	Ser	Asn	Leu	Glu	Tyr	Gly	Arg	Asp	Λsp	Val
		275					280					285			
Arg	Val	Thr	His	Pro	Arg	Thr	Thr	Pro	Val	Asp	Pro	He	Asp	Arg	Ser
	290					295					300				
Cys	Gln	Lys	Ser	Phe	Leu	Ala	Leu	Val	Asn	Leu	Leu	Ser	Tyr	Pro	Ala
305					310					315					320
Пе	Tyr	Glu	Leu	Val	Arg	Asn	Gln	Asp	Leu	Pro	Asn	Lys	Thr	Glu	Tyr
				325					330					335	
Ser	Leu	Arg	Glu	Val	Pro	Thr	Cys	Val	He	Asp	He	He	Asp	Arg	Leu
			340					345					350		
lle	11e	Leu	Asn	Ser	Glu	Ala	Lys	lle	Arg	Ser	Leu	Phe	Asn	Tyr	Glu
		355					360					365			
Gln	Ser	His	He	Phe	Gly	Leu	Arg	Leu	Leu	Ser	Val	He	Cys	Cys	Asp
	370					375					380				
Leu	Asp	Thr	Leu	Leu	Leu	Leu	Glu	Ala	Gln	Tyr	Gln	Val	Ser	Glu	Met
385					390					395					400
Leu	Leu	Asn	Ala	Gln	Glu	Glu	Asn	He	Leu	Glu	He	Ser	Glu	Ser	His
				405					410					415	
Arg	Asp	Phe	He	lle	Asp	Gly	Leu	Ser	Val	Glu	Arg	Asn	His	Val	Leu
			420					425					430		

Val	Arg	lle	Asn	Leu	Val	Gly	G1 y	Pro	Leu	Glu	Arg	He	Leu	Pro	Pro
		435					440					445			
Arg	Leu	Leu	Glu	Lys	Ser	Asp	Asn	Pro	Tyr	Pro	Trp	Pro	Met	Phe	Ser
	450					455					460				
Ser	Tyr	Pro	Leu	Pro	Asn	Cys	Tyr	Leu	Ser	Asp	He	Thr	Arg	Asn	Ala
465					470					475					480
Gly	He	Lys	G1n		Asn	Asp	l.eu	Asp	Lys	Leu	Leu	Leu	Cys	Leu	Lys
				485					490					495	
He	Ser	Asp		Gln	Thr	Glu	Trp		Glu	Asn	Cys	Gln	Arg	Gln	Phe
			500				_	505					510		
Cys	Lys		Met	Lys	Ala	Lys		Asp	lle	He	Ser		Glu	Ala	Leu
7.1	0.1	515		0.1			520					525			
He		Leu	Leu	GIu	Lys	Phe	Val	Leu	His	Leu		G]u	Ser	Pro	Ser
C1	530	т	DL.	D	C .	535	C1	т	TI	. 1	540		. 1		
545	Cys	lyr	Pne	Pro		Val	Glu	lyr	Ihr		Ihr	Asp	Ala	Asn	
	Acn	Glu	Sor	Lou	550	Sor	Vol	Cl _n	Cln	555	C1	II.	Lus	Va.	560
Lys	ASII	Olu	sei	565	261	Ser	vai	GIII	570	Leu	Gry	116	Lys	мет 575	ınr
Val	Arg	Tvr	Glv		Phe	Leu	Ser	Leu		Lve	Aen	G1 v	Ala		Acn
7 (3.1	111 6	.,.	580	Lyo	1110	Lea	501	585	Leu	Lys	nsp	Ory	590	oru	ASII
Asp	Leu	Thr		Val	Leu	Lys	His		Glu	Arg	Phe	Leu		Gln	Gln
•		595	•		,		600	- 3		0		605	2,0		0111
Gln	Thr	Ser	He	Lys	Ser	Ser		Leu	Cys	Leu	Gln		Asn	Tvr	Ala
	610					615					620			·	
Gly	His	Asp	Trp	Phe	Val	Ser	Ser	Leu	Phe	Met	He	Met	Leu	Gly	Asp
625					630					635					640
Lys	Glu	Lys	Thr	Phe	Gln	Phe	Leu	His	Gln	Phe	Ser	Arg	Leu	l.eu	Thr
				645					650					655	
Ser	Ala	Phe	Leu	Trp	Leu	Pro	Arg	Leu	His	He	Ser	Ser	Tyr	Leu	Pro
			660					665					670		
Asn	Asp	Thr	Val	Glu	Ser	Gly	lle	His	Pro	Val	Tyr	Phe	Cys	Ser	Thr
		675					680					685			
His	Tyr	lle	Glu	Met	Leu	Leu	Lys	Ala	Glu	Leu	Pro	Leu	Val	Phe	Ser
	690					695					700				
	Phe	His	Met	Ser	Gly	Phe	Ala	Pro	Ser	Gln	He	Cys	Leu	Gln	Trp
705					710					715					720

lle Thr Gln Cys Phe Trp Asn Tyr Leu Asp Trp lle Glu lle Cys His Tyr lle Ala Thr Cys Val Phe Leu Gly Pro Asp Tyr Gln Val Tyr lle Cys lle Ala Val Phe Lys His Leu Gln Gln Asp lle Leu Gln His Thr Gln Ala Gln Asp Leu Gln Val Phe Leu Lys Glu Glu Ala Leu His Gly Phe Arg Val Ser Asp Tyr Phe Glu Tyr Met Glu Ile Leu Glu Gln Asn Tyr Arg Thr Val Leu Leu Arg Asp Met Arg Asn Ile Arg Leu Gln Ser

Thr

<210> 3266

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3266

Met Phe Ser His Leu Gln Ile Phe Val Phe Pro Gln Thr Lys Arg Lys Lys Thr Thr Leu Tyr Ser Leu Phe Tyr Ser Val Thr Leu Leu Cys Tyr Val Arg Asn Leu Lys Tyr Ile Gly Asp Val Gly lle Leu Ser Leu Thr Ala His Cys Thr Gly Gln Glu Ser Thr Val Phe Gln Leu Glu Phe Arg Thr Pro Gly Phe Glu Val Glu Asp Asp His Cys Ser Thr Trp Phe Gly lle Ala Thr Gly Val Ala Lys Pro Lys Glu Gly Tyr lle Arg Lys Gly Gly Val Arg Arg Gln Asn Lys Glu Lys Glu Glu Trp Val Phe Tyr Leu

Phe Ser Phe Ile Asn 115

<210> 3267

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3267

Met Phe Arg Phe His Thr Lys Lys Glu His Thr Phe Thr Ile Phe Ser

1 5 10 15

Gly Gly Cys Leu Leu His Trp Gln Ala Gly Thr Glu Phe Phe Leu 20 25 30

His Asp Lys Ser Gly Gly Leu Leu Val Arg Glu Pro Met Gly lle Phe 35 40 45

Ser Trp Lys Glu Tyr Ser Ser 11e Pro Ser Pro Asn Pro Thr Val I1e 50 55 60

Phe Ile Thr Leu Gly Gln Gly Cys Ile Glu Cys Val Cys Val Cys Val 65 70 75 80

Cys Val Cys Val Cys Val Arg Val Gly Val Val Leu Gly His
85 90 95

Leu Trp Pro Val Thr Lys Val Thr Arg Thr lle Cys Val Pro Ala Val 100 105 110

Ile Ala Cys Asp Cys Gly Cys Ile Ser Ser Leu Pro Arg Ser Leu Val 115 120 125

Thr Leu Ser Ala His Gln Gly Arg Glu Leu Ser Thr Asp Thr Cys Gln 130 135 140

Gly Pro Leu

145

<210> 3268

<211> 797

<212> PRT

<213> Homo sapiens

<400)> 32	268													
Met	Ala	Ala	Leu	Ala	Tyr	Asn	Leu	Gly	Lys	Arg	Glu	Пе	Asn	His	Tyr
1				5					10					15	
Phe	Ser	Val	Arg	Ser	Ala	Lys	Val	Leu	Ala	Leu	Val	Ala	Val	Leu	Leu
			20					25					30		
Leu	Ala	Ala	Cys	His	Leu	Ala	Ser	Arg	Arg	Tyr	Arg	Gly	Asn	Asp	Ser
		35					40					45			
Cys	Glu	Tyr	Leu	Leu	Ser	Ser	Gly	Arg	Phe	Leu	Gly	Glu	Lys	Val	Trp
	50					55					60				
Gln	Pro	His	Ser	Cys	Met	Met	His	Lys	Tyr	Lys	Ile	Ser	Glu	Ala	Lys
65					70					75					80
Asn	Cys	Leu	Val	Asp	Lys	His	Пe	Ala	Phe	He	Gly	Asp	Ser	Arg	He
				85					90					95	
Arg	Gln	Leu	Phe	Tyr	Ser	Phe	Val	Lys	11e	11e	Asn	Pro	Gln	Phe	Lys
			100					105					110		
Glu	Glu	Gly	Asn	Lys	His	Glu	Asn	lle	Pro	Phe	Glu	Asp	Lys	Thr	Ala
		115					120					125			
Ser	Va]	Lys	Val	Asp	Phe	Leu	Trp	His	Pro	Glu	Val	Asn	Gly	Ser	Met
	130					135					140				
Lys	Gln	Cys	He	Lys	Val	Trp	Thr	Glu	Asp	Ser	He	Ala	Lys	Pro	Hìs
145					150					155					160
Val	He	Val	Ala	G]y	Ala	Ala	Thr	Trp	Ser	lle	Lys	lle	His	Asn	G1 y
				165					170					175	
Ser	Ser	Glu	Ala	Leu	Ser	Gln	Tyr	Lys	Met	Asn	lle	Thr	Ser	He	Ala
			180					185					190		
Pro	Leu	Leu	Glu	Lys	Leu	Ala	Lys	Thr	Ser	Asp	Va]	Tyr	Trp	Val	Leu
		195					200					205			
Gln	Asp	Pro	Val	Tyr	Glu	Asp	Leu	Leu	Ser	Glu	Asn	Arg	Lys	Met	lle
	210					215					220				
	Asn	Glu	Lys	He		Ala	Tyr	Asn	Glu		Ala	Va]	Ser	He	
225					230					235					240
Asn	Ser	Ser	Thr		Asn	Ser	Lys	Ser		Val	Lys	Met	Phe		Val
				245					250					255	
Ser	Lys	Leu		Ala	Gln	Glu	Thr		Met	Glu	Ser	Leu	Asp	Gly	Leu
			260					265					270		

	His	Leu	Pro	Glu	Ser	Ser	Arg	Glu	Thr	Thr	Ala	Met	lle	Leu	Met	Asn
			275					280					285			
	Val	Ty.r 290	Cys	Asn	Lys	He	Leu 295	Lys	Pro	Val	Лsp	Gly 300	Ser	Cys	Cys	Gln
	Pro	Arg	Pro	Pro	Val	Thr	Leu	He	Gln	Lys	Leu	Ala	Ala	Cys	Phe	Phe
	305					310					315					320
	Thr	Leu	Ser	He	11e	Gly	Tyr	Leu	Пe	Phe	Tyr	He	He	His	Arg	Asn
					325					330					335	
	Ala	His	Arg	Lys	Asn	Lys	Pro	Cys	Thr	Asp	Leu	Glu	Ser	G1 y	Glu	Glu
				340					345					350		
	Lys	Lys	Asn	lle	He	Asn	Thr	Pro	Val	Ser	Ser	Leu	Glu	Ile	Leu	Leu
			355					360					365			
	Gln		Phe	Cys	Lys	Leu	Gly	Leu	He	Met	Ala	Tyr	Phe	Tyr	Met	Cys
		370					375					380				
		Arg	Ala	Asn	Leu		Met	Lys	Glu	Asn		Phe	Tyr	Thr	His	Ser
	385	D)	DI		D	390	2.1				395					400
	Ser	Phe	Phe	He		lle	He	Tyr	He		Val	Leu	Gly	Val		Tyr
	A = 12	C1	۸	ть	405	C1	TI	1	W . 1	410			61	61	415	
	ASII	Glu	ASII	1nr 420	Lys	GIU	inr	Lys		Leu	Asn	Arg	61u	Gln	Ihr	Asp
	Glu	Trn	lve		Trn	Mot	Cln.	Lou	425	110	Lou	Ho	Tun	430 His	110	Com
	oru	пр	435	Oly	qıı	Met	OIII	440	vai	116	Leu	116	445	1115	116	261
	G1 v	Ala		Thr	Phe	Leu	Pro		Tyr	Met	Hie	He		Val	Lau	Val
	,	450					455		.,.		111.5	460	71.3 8	101	Bea	, (1)
	Ala		Tyr	Leu	Phe	Gln		Glv	Tvr	Glv	His		Ser	Tyr	Phe	Trp
	465					470		•	•	•	475					480
	lle	Lys	Gly	Asp	Phe	Gly	He	Tyr	Arg	Val	Cys	Gln	Val	Leu	Phe	
					485					490					495	
	Leu	Asn	Phe	Leu	Val	Val	Val	Leu	Cys	lle	Val	Met	Asp	Arg	Pro	Tyr
				500					505					510		
1	Gln	Phe	Tyr	Tyr	Phe	Val	Pro	Leu	Val	Thr	Val	Trp	Phe	Met	Val	He
			515					520					525			
٠	Tyr	Val	Thr	Leu	Ala	Leu	Trp	Pro	Gln	Пе	He	Gln	Lys	Lys	Ala	Asn
		530					535					540				
(G1 y	Asn	Cys	Phe	Trp	His	Phe	Gly	Leu	Leu	Leu	Lys	Leu	Gly	Phe	Leu
	545					550				•	555					560

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Leu Leu Phe Ile Cys Phe Leu Ala Tyr Ser Gln Gly Ala Phe Glu Lys
                                    570
Ile Phe Ser Leu Trp Pro Leu Ser Lys Cys Phe Glu Leu Lys Gly Asn
            580
                                585
                                                     590
Val Tyr Glu Trp Trp Phe Arg Trp Arg Leu Asp Arg Tyr Val Val Phe
                            600
                                                 605
His Gly Met Leu Phe Ala Phe Ile Tyr Leu Ala Leu Gln Lys Arg Gln
   610
                        615
                                             620
Ile Leu Ser Glu Gly Lys Gly Glu Pro Leu Phe Ser Asn Lys Ile Ser
                                         635
625
                    630
                                                             640
Asn Phe Leu Leu Phe Ile Ser Val Val Ser Phe Leu Thr Tyr Ser Ile
                645
                                    650
Trp Ala Ser Ser Cys Lys Asn Lys Ala Glu Cys Asn Glu Leu His Pro
            660
                                665
                                                     670
Ser Val Ser Val Val Gln Ile Leu Ala Phe Ile Leu Ile Arg Asn Ile
                            680
Pro Gly Tyr Ala Arg Ser Val Tyr Ser Ser Phe Phe Ala Trp Phe Gly
   690
                        695
                                             700
Lys Ile Ser Leu Glu Leu Phe Ile Cys Gln Tyr His Ile Trp Leu Ala
705
                    710
                                        715
                                                             720
Ala Asp Thr Arg Gly Ile Leu Val Leu Ile Pro Gly Asn Pro Met Leu
                725
                                    730
Asn lle lle Val Ser Thr Phe lle Phe Val Cys Val Ala His Glu lle
            740
                                745
                                                     750
Ser Gln Ile Thr Asn Asp Leu Ala Gln Ile Ile Ile Pro Lys Asp Asn
                            760
Ser Ser Leu Leu Lys Arg Leu Ala Cys Ile Ala Ala Phe Phe Cys Gly
   770
                        775
                                             780
Leu Leu Ile Leu Ser Ser Ile Gln Asp Lys Ser Lys His
785
                    790
                                        795
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<211> 763

<212> PRT

<213> Homo sapiens

<400)> 32	269													
Met	His	Ser	Ser	Gln	Asn	Val	Gln	Thr	Gln	Glu	Ser	Ser	Ser	Pro	Gln
1				5					10					15	
Ser	Gln	Lys	Phe	Leu	Pro	Ala	Val	Gln	Ser	Ser	Ser	Phe	Ala	Se.r	Ser
			20					25					30		
Thr	His	Cys	Gln	Thr	Leu	Gln	Asn	Asn	He	Thr	Ser	Pro	Asp	Pro	Lys
		35					40					45			
Ser	Tyr	Ala	Glu	Arg	Lys	Leu	Asp	Ser	Asp	Val	Tyr	Pro	Ser	Ser	Lys
	50					55					60				
Gln	Glu	Asp	Gly	Phe	Pro	Met	Gln	Glu	Leu	Gln	Val	Leu	Gln	Pro	Gln
65					70					75					80
Ala	Ser	Leu	Glu	Ser	Ser	Thr	Gln	Arg	Leu	Ser	Asp	Gly	Glu	Пе	Asn
				85					90					95	
Ala	Gln	Glu	Ser	Thr	Tyr	Lys	Val	Ser	Lys	Ala	Asp	Asp	Arg	Tyr	Ser
			100					105					110		
Gln	Ser	Val	lle	Arg	Ser	Asn	Ser	Arg	Leu	Glu	Asp	Gln	Val	He	Gly
		115					120					125			
Val	Ala	Leu	Gln	Ala	Ser	Lys	Lys	Glu	Glu	Ser	Val	Val	Gly	Ser	Val
	130					135					140				
Thr	Gln	Leu	Asn	Gln	Gln	He	Gly	Gln	Val	Asn	Asn	Ala	Ala	Thr	Leu
145					150					155					160
Asp	Leu	Lys	Asn	Ser	Thr	Asn	Leu	11e	Gln	Thr	Pro	Gln	He	Arg	Leu
				165					170					175	
Asn	Thr	Lys	Asp	Leu	Lys	Gln	Gln	His	Pro	Leu	He	Leu	Lys	Val	His
			180					185					190		
Glu	Ser	Lys	Val	Gln	Glu	Gln	His	Asp	Gln	lle	lle	Asn	Ala	Ser	Ser
		195					200					205			
Gln	lle	Gln	He	Pro	Asn	His	Ala	Leu	Gly	His	Gly	His	Gln	Ala	Ser
	210					215					220				
Leu	Pro	Asn	Thr	Gln	Val	Leu	Leu	Asp	Ser	Ala	Cys	Asp	Leu	Gln	He
225					230					235					240
Leu	Gln	Gln	Ser	lle	Leu	Gln	Ala	Gly	Leu	Gly	Gln	Val	Lys	Ala	Ser
				245					250					255	
Leu	Gln	Ala	Gln	Arg	Val	GIn	Ser	Pro	Gln	Gln	He	Val	His	Pro	Phe

			260					265					270		
Leu	Gln	Met	G1u	Gly	His	Val	Пе	Gln	Ser	Asn	G]y	Asp	His	Ser	Gln
		275					280					285			
Gln	Gln	Leu	His	Pro	Gln	Asn	Ser	Glu	Val	Met	Lys	Met	Asp	Leu	Ser
	290					295					300				
Glu	Ser	Ser	Lys	Pro	Leu	Gln	Gln	His	Leu	Thr	Thr	Lys	Gly	His	Phe
305					310					315					320
Ser	Glu	Thr	Asn	Gln	His	Asp	Ser	Lys	Asn	Gln	Phe	Val	Ser	Leu	Gly
				325					330					335	
Ser	Met	Cys	Phe	Pro	Glu	Ala	Val	Leu	Leu	Ser	Asp	Glu	Arg	Asn	He
			340					345					350		
Leu	Ser	Asn	Val	Asp	Asp	11e	Leu	Ala	Ala	Thr	Ala	Ala	Ala	Cys	Gly
		355					360					365			
Val	Thr	Pro	Thr	Asp	Phe	Ser	Lys	Ser	Thr	Ser	Asn	Glu	Thr	Met	Gln
	370					375					380				
Ala	Val	Glu	Asp	Gly	Asp	Ser	Lys	Ser	His	Phe	Gln	Gln	Ser	Leu	Asp
385					390					395					400
Val	Arg	His	Val	Thr	Ser	Asp	Phe	Asn	Ser	Met	Thr	Ala	Thr	Val	Gly
				405					410					415	
Lys	Pro	Gln	Asn	lle	Asn	Asp	Thr	Ser	Leu	Asn	Gly	Asn	Gln	Val	Thr
			420					425					430		
Val	Asn	Leu	Ser	Pro	Va]	Pro	Ala	Leu	Gln	Ser	Lys	Met	Thr	Leu	Asp
		435					440					445			
Gln	Gln	His	lle	Glu	Thr	Pro	Gly	Gln	Asn	lle	Pro	Thr	Lys	Val	Thr
	450					455					460				
Ser	Ala	Val	Val	Gly	Pro	Ser	His	Glu	Val		Glu	Gln	Ser	Ser	Gly
465					470					475					480
Pro	Phe	Lys	Lys		Ser	Ala	Thr	Asn		Glu	Ser	Glu	Glu		Ser
				485					490					495	
Glu	Ala	Pro		Asp	Ser	Thr	Leu		Asn	Asn	Arg	Asn	G]n	Glu	Phe
			500					505		_			510		_
Val	Ser		Ser	Arg	Ser	He		Gly	Glu	Ser	Ala		Ser	Glu	Ser
		515					520			,		525			
Glu		Thr	Leu	Gly	Gly		Asp	Ser	Gly	Vai		Met	Asn	Pro	Ala
	530			. 1		535			. 7	61	540	C1		4.7	17 7
Aro	Ser	Ala	Leu	Ala	Len	Leu	Ala	Met	Ala	uln	Ser	GIV	Asp	Ala	val

545					550					555					560
Ser	Val	Lys	lle	Glu	Glu	Glu	Asn	Gln	Asp	Leu	Met	His	Phe	Asn	Leu
				565					570					575	
Gln	Lys	Lys	Gly	Ala	Lys	Gly	Lys	Gly	Gln	Val	Lys	Glu	Glu	Asp	Asn
			580					585					590		
Ser	Asn	Gln	Lys	Gln	Leu	Lys	Arg	Pro	Ala	Gln	Gly	Lys	Arg	Gln	Asn
		595					600					605			
Pro	Arg	Gly	Thr	Asp	He	Tyr	Leu	Pro	Tyr	Thr	Pro	Pro	Ser	Ser	Glu
	610					615					620				
Ser	Cys	His	Asp	Gly	Tyr	Gln	His	G1n	Glu	Lys	Met	Arg	Gln	Lys	Ile
625					630					635					640
Lys	Glu	Val	Glu	Glu	Lys	Gln	Pro	Glu	Val	Lys	Thr	Gly	Phe	He	Ala
				645					650					655	
Ser	Phe	Leu	Asp	Phe	Leu	Lys	Ser	Gly	Pro	Lys	Gln	Gln	Phe	Ser	Thr
			660					665					670		
Leu	Ala	Val	Arg	Met	${\rm Pro}$	Asn	Arg	Thr	Arg	Arg	Pro	Gly	Thr	G1n	Met
		675					680					685			
Val	Arg	Thr	Phe	Cys	Pro	Pro	Pro	Leu	Pro	Lys	Pro	Ser	Ser	Thr	Thr
	690					695					700				
Pro	Thr	Pro	Leu	Val	Ser	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Ser	Asp	Lys
705					710					715					720
Val	Asp	Asn	Glu	Leu	Lys	Asn	Leu	Glu	His	Leu	Ser	Ser	Phe	Ser	Ser
				725					730					735	
Asp	Glu	Asp	Asp	Pro	Gly	Tyr	Ser	Gln	Asp	Ala	Tyr	Lys	Ser	Val	Pro
			740					745					750		
Thr	Pro	Leu	Thr	Thr	Leu	Asp	Ala	Thr	Ser	Glu					
		755					760								

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3270

Met Asn Arg His Phe Ser Lys Glu Asp Ile Tyr Val Ala Asn Lys His

Ile Lys Lys Ser Ser Thr Leu Leu Ile Ile Arg Glu Met Gln Arg Arg Thr Thr Met Arg Tyr His Leu Met Pro Val Arg Met Val 11e 11e Lys Lys Ser Lys Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Val Gly Thr Leu Leu His Cys Trp Trp Glu Cys Lys Leu Val Gln Pro Leu Trp Lys Cys Val Trp Leu Phe Leu Lys Asp Leu Glu Leu Glu Ile Leu Phe Val Pro Ala lle Pro Leu Leu Gly lle Tyr Pro Lys Glu Tyr Lys Pro Phe Tvr Tvr Lys Asp Thr Cys Thr Phe Leu Phe Ile Ala Ala Leu Phe Thr lle Ala Lys Thr Gln <210> 3271 <211> 110 <212> PRT <213> Homo sapiens <400> 3271 Met Ala Ser Thr Ala Ala Asn Leu Leu Ala Asn Tyr Asn His Ser Cys Ser Ser Ser Ile Arg Leu Glu Lys Thr Arg Phe Pro Ser Gly Leu Gly Ala Phe Ser Ser Ser Arg Glu Thr His Gln Pro Ser Ala Cys Val Ala Cys Ala Pro Gly Ala Phe Leu Leu lle Arg Ser Met lle Ser Ala Trp

Leu Gln Gly Pro Ala Lys Ser Val Arg Glu Pro Pro Asn Gly Ala Arg

Ser Arg Arg 11e Ser Arg Ser Glu Thr Ser Leu Ser Pro His Leu Leu

Thr Gly Asn Leu Gly Gly Phe Gln Leu Met Phe Phe Ser Pro <210> 3272 <211> 332 <212> PRT <213> Homo sapiens <400> 3272 Met Ala Thr Ile Lys Ser Glu Leu Ile Lys Asn Phe Ala Glu Glu Glu Ala lle His His Asn Lys lle Ser lle Val Gly Thr Gly Ser Val Gly Val Ala Cys Ala Ile Ser Ile Leu Leu Lys Gly Leu Ser Asp Glu Leu Val Leu Val Asp Val Asp Glu Gly Lys Leu Lys Gly Glu Thr Met Asp Leu Gln His Gly Ser Pro Phe Met Lys Met Pro Asn 11e Val Ser Ser Lys Asp Tyr Leu Val Thr Ala Asn Ser Asn Leu Val lle lle Thr Ala Gly Ala Arg Gln Lys Lys Gly Glu Thr Arg Leu Asp Leu Val Gln Arg Asn Val Ser lle Phe Lys Leu Met lle Pro Asn lle Thr Gln Tyr Ser Pro His Cys Lys Leu Leu lle Val Thr Asn Pro Val Asp Ile Leu Thr Tyr Val Ala Trp Lys Leu Ser Gly Phe Pro Lys Asn Arg Val 11e Gly Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Phe Ile Gly Gln Arg Leu Gly Ile His Ser Glu Ser Cys His Gly Leu Ile Leu Gly Glu

His Gly Asp Ser Ser Val Pro Val Trp Ser Gly Val Asn Ile Ala Gly

195	2	200	205
Val Pro Leu Lys	Asp Leu Asn F	Pro Asp lle Gly	Thr Asp Lys Asp Pro
210	215		220
Glu Gln Trp Glu	Asn Val His L	Lys Lys Val Ile	e Ser Ser Gly Tyr Glu
225	230	235	240
Met Val Lys Met	Lys Gly Tyr 1	Thr Ser Trp Gly	lle Ser Leu Ser Val
	245	250	255
Ala Asp Leu Thr	Glu Ser 11e I	Leu Lys Asn Leu	Arg Arg Val His Pro
260		265	270
Val Ser Thr Leu	Ser Lys Gly I	Leu Tyr Gly Ile	Asn Glu Asp Ile Phe
275		280	285
Leu Ser Val Pro	Cys lle Leu C	Gly Glu Asn Gly	lle Thr Asp Leu lle
290	295		300
Lys Val Lys Leu	Thr Leu Glu (Glu Glu Ala Cys	Leu Gln Lys Ser Ala
305	310	315	320
Glu Thr Leu Trp	Glu lle Gln I	Lys Glu Leu Lys	Leu
	325	330	

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3273

Met 11e Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg
1 5 10 15

Val Ala As
n Glu Leu As
n Ala Arg Arg Arg Ser Phe Thr Ala Ala Asp 20 $$25\ \mbox{30}$$

Ser Lys Asp Glu Glu Val Lys Val Ala Pro Arg Arg Ser Phe Leu Asp 35 40 45

Phe Asp Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val 50 55 60

Gln Cys Val Leu Ala Phe Thr Gly Val Ala Gly Tyr 11e Thr Tyr Leu 65 70 75 80

Ser Ile Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val

85 90 95 Leu Thr Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg 100 105 110 His Gln Ser Thr Glu Gly Met Ser lle Lys Met Val Leu Met Trp Thr 120 125 Ser Gly Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro 135 Leu Gln Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala 145 155 Ile Leu Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala 165 170 Pro His Ala Val His Pro Thr Gly Thr Lys Ala Leu 180 185

<210> 3274

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3274

Met Phe Phe Phe Val Glu Met Gly Phe Tyr His Val Gly Gln Ala Gly
1 5 10 15

Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Scr Gln Ser
20 25 30

Ala Gly 11e Thr Gly Val Ser His Tyr Ala Arg Pro Ala Ala Ala Gly
35 40 45

Phe Thr Asn Phe Leu Pro Thr Ala Gly Ala Thr Phe Tyr Ser Lys Glu 50 55 60

Arg Asn Ser Asp His Cys Leu Cys Ser Leu Gly Phe Phe Pro Thr Leu 65 70 75 80

Ser Asn Gly 11e His Gln Phe His Ser Arg Mot Ser Ser Lou Val Leu 85 90 95

Gly Leu Glu Asn Trp Ala Trp Leu Met Asp

<210> 3275 <211> 113 <212> PRT <213> Homo sapiens <400> 3275 Met Glu Leu Ala Ile Trp Tyr Val Gln Gln Pro Ser Leu Arg lle Ala 1 10 15 Lys Cys Ile Gly Asn Ile Phe Gln Ala Val Thr Pro Val Thr Ser Lys 25 Gln Arg Ser Cys Leu Cys Leu Leu Ala Leu Ala Tyr Ala Lys Gly Val 35 45 40 Phe Asn Asn Phe Gly Phe Gln Leu Phe Thr Leu Trp Phe Gln Leu Arg 50 55 60 Leu Gly Arg Asn Trp Pro Gln Asp Lys Val Thr Pro Glu Phe Gly Thr 70 75 Lys Pro Gly Ala Lys Asp Ser Asp Gln Thr Ser Trp Ala Ser Gly Ser 85 Ala Pro Arg Gly Leu Lys Pro Thr Arg Val Arg Phe Gly 11e Cys Arg 100 105 110 Val <210> 3276 <211> 197 <212> PRT <213> Homo sapiens

<400> 3276

Met Ala Pro Ala Ser Val Pro Ser Ser Leu Gln Gly Gly Leu Gly Ala

1 5 10 15

Cys Leu Gly Arg Lys Glu Arg Arg Cys Arg Ser Ala Trp Gly Gly Cys
20 25 30

Ser Arg Arg Trp Pro Gln Ala Gln Ala Pro Gln Gly Leu Phe Pro Pro

Ala Arg Pro Gly Arg Ala Ala Trp Trp Arg Val Arg Glu Asp Pro Gly Gly Gly Pro Ser Cys Lys Asn Trp Trp Gly Pro Arg Ser Pro Pro Ser Arg Gly Gly Leu Leu Pro Phe Gly Cys Cys Val Gln Ser Pro Val Ser Cys Ser Leu Arg Leu Tyr Pro Ala Ala Phe Pro Pro Ala Gly Glu Ala Arg Ala Ala Leu Cys Trp Pro Val Leu Pro Leu Pro Thr Arg Val Pro Trp Trp Ser Cys Arg Gly Ala His Val Thr Ser Leu Pro Thr Gly Val Arg Ala Gly Pro Gln Pro Glu Arg Glu Arg Pro Gln Ala Cys Ala Gly Gly Gly Asn Gly Gln Leu Arg Val Val Val Pro Gly Ala Leu His Ser Arg Gly Arg Gly Cys Val Arg Gly Val Arg Gly Ile Val Cys Pro Ala Ala Gly Thr Gln

<210> 3277

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3277

Cys Pro Ala His Asp Asp Phe Tyr Leu Val Val Cys Asn Asp Cys Asn Gln Val Val Lys Pro Gln Ala Phe Gln Ser His Tyr Glu Arg Arg His Ser Ser Ser Ser Lys Pro Pro Leu Ala Val Pro Pro Thr Ser Val Phe Ser Phe Phe Pro Ser Leu Ser Lys Ser Lys Gly Gly Ser Ala Ser Gly Ser Asn Arg Ser Ser Ser Gly Gly Val Leu Ser Ala Ser Ser Ser Ser Ser Lys Leu Leu Lys His Pro Leu Thr Lys Asn Tyr Ser

<210> 3278

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3278

Met Asn Leu Pro Arg Ala Glu Arg Pro Arg Ser Thr Pro Gln Arg Ser l Leu Arg Asp Ser Asp Gly Glu Asp Gly Lys Ile Asp Val Leu Gly Glu Glu Glu Asp Glu Asp Glu Val Glu Asp Glu Glu Glu Glu Ala Ser Gln Lys Phe Leu Glu Gln Ser Leu Gln Pro Gly Leu Gln Val Ala Arg Trp Gly Gly Val Ala Leu Pro Arg Glu His Ile Glu Gly Gly Gly Pro Ser Asp Pro Ser Glu Phe Gly Thr Glu Phe Arg Ala Pro Pro Arg Ser Ala Ala Ala Ser Glu Asp Ala Arg Gln Pro Ala Lys Pro Pro Tyr Ser Tyr

lle Ala Leu Ile Thr Met Ala Ile Leu Gln Ser Pro His Lys Arg Leu

		115					120					125			
Thr	Leu	Ser	Gly	Пe	Cys	Ala	Phe	lle	Ser	Gly	Arg	Phe	Pro	Tyr	Tyr
	130					135					140				
Arg	Arg	Lys	Phe	Pro	Ala	Trp	Gln	Asn	Ser	He	Arg	llis	Asn	Leu	Ser
145					150					155					160
Leu	Asn	Asp	Cys	Phe	Val	Lys	lle	Pro	Arg	Glu	Pro	Gly	His	Pro	Gly
				165					170					175	
Lys	Gly.	Thr	Tyr	Trp	Ser	Leu	Asp	Pro	Ala	Ser	Gln	Asp	Met	Phe	Asp
			180					185					190		
Asn	Gly	Ser	Phe	Leu	Arg	Arg	Arg	Lys	Arg	Phe	Lys	Arg	His	Gln	Leu
		195					200					205			
Thr	Pro	Gly	Ala	His	Leu	Pro	His	Pro	Phe	Pro	Leu	Pro	Ala	Ala	His
	210					215					220				
Ala	Ala	Leu	His	Asn	Pro	Arg	Pro	Gly	Pro	Leu	Leu	Gly	Ala	Pro	Ala
225					230					235					240
Leu	Pro	Gln	Pro	Val	Pro	G1 y	Ala	Tyr	Pro	Asn	Thr	Ala	Pro	G1 y	Arg
				245					250					255	
Arg	Pro	Tyr	Ala	Leu	Leu	His	Pro	His	Pro	Pro	Arg	Tyr	Leu	Leu	Leu
			260					265					270		
Ser	Ala	Pro	Ala	Tyr	Ala	Gly	Ala	Pro	Lys	Lys	Ala	Glu	Gly	Ala	Asp
		275					280					285			
Leu	Ala	Thr	Pro	Gly	Thr	Leu	Pro	Val	Leu	Gln	Pro	Ser	Leu	G1 y	Pro
	290					295					300				
Gln	Pro	Trp	Glu	Glu	Gly	Lys	Gly	Leu	Ala	Ser	Pro	Pro	Gly	G1 y	Gly
305					310					315					320
Cys	He	Ser	Phe	Ser	lle	Glu	Ser	He	Met	Gln	Gly	Val	Arg	Gly	Ala
				325					330					335	
Gly	Thr	Gly		Ala	Gln	Ser	Leu		Pro	Thr	Ala	Trp		Tyr	Cys
			340					345					350		
Pro	Leu		Gln	Arg	Pro	Ser		Leu	Ser	Asp	Asn		Ala	Ala	Thr
		355					360				_	365			
Ala		Ala	Ser	Gly	Gly		Leu	Arg	GIn	Arg		Arg	Ser	His	GIn
0.1	370	0.1		6.1		375	Б	., .	0.1		380	C i			
	Arg	61y	Ala	ыу	Arg	Ala	Pro	va1	Gly		val	61y	Ala	Ala	
385	C	C 1	C1	C3	390	C.1				395					400
val	ser	υГУ	υГУ	υLy	Arg	UIV	Leu								

<21	0> 3	279													
<21	1> 3	24													
<21	2> P	RT													
<21	3> H	omo	sapi	ens											
<40	0> 3	279													
Met	Gly	Asp	Leu	Leu	Pro	Arg	Ala	Trp	Pro	Gly	Ala	Gly	Cys	Thr	Glu
1				5					10					15	
Thr	Gln	Thr	Thr	Ser	G1n	Gly	Pro	Gln	Glu	Leu	Ala	Val	Pro	Thr	Ala
			20					25					30		
G] u	Cys		Ser	Cys	Ser	Phe	Tyr	Phe	Cys	Val	Cys	Pro	Glu	Ala	Leu
		35					40					45			
Pro		Glu	Glu	Gln	Glu		Ser	Gly	Ser	Glu	Glu	Arg	Gly	Glu	G1 u
	50					55					60				
	Gly	Thr	Ser	Ser		Asp	Tyr	Arg	His		Leu	Arg	Met	Trp	Ala
65 ,	61		0.1		70	_	0.1			75					80
Lys	Glu	Lys	Glu		GIn	Lys	Glu	Thr		Lys	Asp	Leu	Pro		Met
Λ	C1	C1	C1.	85 DI		C1	,		90	T)		m.		95	D.I.
ASN	GIN	61u	Gln	Pne	116	61u	Leu		Lys	Ihr	Leu	lyr		Met	Phe
Con	C1	A an	100	Mat	C1	C1	۸	105	т	112.	41.	T1.	110	TI	v i
sei	Giu	115	Pro	met	Glu	GIN		Leu	ıyr	HIS	ма		Ala	Inr	val
ΔΙα	Sor		Leu	Lou	Ara	T1.	120	C1	Vo.1	C1	1	125	Dha	Com	41-
Ma	130	Leu	ı,cu	Leu	AI g	135	Oly	Olu	vai	ury	140	Lys	rne	sei	мта
Arg		Glv	Arg	lvs	Pro		Asn	Cvs	Ala	Thr		Glu	Aen	Glu	Pro
145		01,	8	2,0	150	,,,,	пор	0,5	MIG	155	O1,	Olu	пэр	Olu	160
	Ala	Pro	Glu	Leu		Gln	Asp	Ala	Ala		Glu	Len	Gln	Pro	
				165			тр		170	6	010	1500	0111	175	
Ala	Ala	Gly	Asp		Gln	Ala	Lys	Ala		Glv	Asp	Thr	His		Glv
		·	180				Ĭ	185	•	,	,		190		
Thr	Ala	Pro	Gln	Glu	Ser	Gln	Val		Val	Glu	Gly	Gly		Gly	Glu
		195					200				•	205		,	
Gl y	Gln	Gly	Ser	Pro	Ser	G1n	Leu	Leu	Ser	Asp	Asp		Thr	Lvs	Asp

Asp Met Ser Met Ser Ser Tyr Ser Val Val Ser Thr Gly Ser Leu Gln Cys Glu Asp Leu Ala Asp Asp Thr Val Leu Val Gly Gly Glu Ala Cys Ser Ser Thr Ala Arg lle Gly Gly Thr Val Asp Thr Asp Trp Cys lle Ser Phe Glu Gln 'lle Leu Ala Ser 11e Leu Thr Glu Ser Val Leu Val Asn Phe Phe Glu Lys Arg Val Asp Ile Gly Leu Lys Ile Lys Asp Gln Lys Lys Val Glu Arg Gln Phe Ser Thr Ala Ser Asp His Glu Gln Pro Gly Val Ser Gly

<210> 3280

⟨211⟩ 233

<212> PRT

<213> Homo sapiens

<400> 3280

Met Phe His Arg Thr Pro Pro Arg Arg Ser Phe Pro Asn Pro Ser Trp Lys Gly Pro Gly Ser Lys Gly His Gln Ser Cys Leu Ser Asp Gln Leu Ala Val Ser Ser Gly Cys Trp Pro Glu Thr Ala Leu Ala Leu Ser Lys Val Thr Val His Cys Leu Ala Ile Ala Ser Leu Ser Gly Pro Ala Leu Gly Leu Val Arg Leu Leu Gln His Pro Trp Leu Phe Pro Trp Gln Cys Asp Tyr Pro Ala Leu Thr Gln Ser Lys Gly Val Pro Leu Ser Trp Val

				85					90					95	
Lys	Phe	Thr	Arg	Arg	Leu	Leu	Lys	Cys	Leu	Leu	Arg	Gly	Asn	Leu	Cys
			100					105					110		
Leu	Ser	Leu	Ser	Leu	Ser	Leu	Ser	Leu	Ser	Leu	Ser	Leu	Ser	Leu	Ser
		115					120					125			
Leu	Ser	Leu	Ser	Leu	Ser	Gln	Cys	He	Ser	Leu	Leu	Ser	Phe	Thr	Phe
	130					135					140				
Pro	Phe	Phe	Leu	Ser	Lys	Asn	Asn	Val	Leu	Val	Glu	Ala	Leu	Val	Thr
145					150					155					160
Leu	Ile	Asn	Gln	Asn	Leu	Pro	Phe	Pro	Va1	Ser	Leu	Phe	Leu	Arg	Pro
				165					170					175	
Phe	His	Pro	His	Tyr	Leu	Leu	Leu	Pro	Arg	Asn	Met	Thr	Asp	His	G]n
			180					185					190		
Asp	Ala	Ala	Arg	Arg	Glu	Asp	Leu	Ser	Gln	Lys	Pro	Thr	Ser	Lys	Met
		195					200					205			
Gly	Gly	Arg	Cys	Gly	Leu	Arg	Ser	Ser	Ala	Met	His	Pro	Lys	Pro	Leu
	210					215					220				
Thr	Phe	Pro	Leu	Trp	Lys	Cys	Thr	Gly							
225					230										
<210)> 32	281													
<21	1> 17	76													
<212	2> PF	T7													
<213	3> Ho	omo s	sapie	ens											
<400)> 32	281													
Met	Ala	Ala	Val	Glu	Lys	Arg	Arg	Gln	Ala	Val	Pro	Pro	Pro	Ala	G1 y
1				5					10					15	
Phe	Thr	Asp	Ser	Gly	Arg	Gln	Ser	Val	Ser	Arg	Ala	Ala	Gly	Ala	Ala
			20					25					30		
Glu	Ser	Glu	Glu	Asp	Phe	Leu	Arg	Gln	Va]	Gly	Val	Thr	Glu	Met	Leu
		35					40					45			
Arg	Ala	Ala	Leu	Leu	Lys	Val	Leu	G1 u	Ala	Arg	Pro	Glu	G1u	Pro	11e
	50					55					60				

Ala Phe Leu Ala His Tyr Phe Glu Asn Met Gly Leu Arg Ser Pro Val 65 70 75 80 Asn Gly Gly Ala Gly Glu Pro Pro Gly Gln Leu Leu Gln Gln Gln 90 85 Arg Leu Gly Arg Ala Leu Trp His Leu Arg Leu Ala His His Ser Arg 105 Arg Cys Ala Val Gly Arg Leu Gly Arg Val Gly Gln Arg Trp Thr Ser 125 115 120 Thr Pro Ser Met Pro Arg Ala Ala Pro Tyr Pro Gln Arg Arg Arg Arg 135 140 130 Gly Pro Gly Leu Ala Gly Ser Cys Ser Ala Arg Cys Leu Leu Gly Trp 155 150 Asp Gly Ser Asp Lys Val Gly Trp Arg Val Arg Ala Ser Val Arg Arg 170 175 165

<210> 3282

<211> 924

<212> PRT

<213> Homo sapiens

<400> 3282

Met 11e Ser Gln Thr Gln Ser Leu Gly Gly Pro Pro Leu Glu His Glu
1 5 10 15

Val Pro Gly His Pro Pro Gly Gly Asp Met Gly Gln Gln Met Asn Met
20 25 30

Met 11e Gln Arg Leu Gly Gln Asp Ser Leu Thr Pro Glu Gln Val Ala 35 40 45

Trp Arg Lys Leu Gln Glu Glu Tyr Tyr Glu Glu Lys Arg Arg Lys Glu
50 55 60

Glu Gln 11e Gly Leu His Gly Ser Arg Pro Leu Gln Asp Met Met Gly
65 70 75 80

Met Gly Gly Met Met Val Arg Gly Pro Pro Pro Pro Tyr His Ser Lys 85 90 95

Pro Gly Asp Gln Trp Pro Pro Gly Met Gly Ala Gln Leu Arg Gly Pro
100 105 110

Met	Asp	Val	Gln	Asp	Pro	Met	Gln	Leu	Arg	Gly	Gly	Pro	Pro	Phe	Pro
		115					120					125			
Gly	Pro	Arg	Phe	Pro	Gly	Asn	Gln	He	Gln	Arg	Val	Pro	Gly	Phe	G1y
	130					135					140				
Gly	Met	Gln	Ser	Met	Pro	Met	Glu	Val	Pro	Met	Asn	Ala	Met	Gln	۸rg
145					150					155					160
Pro	Val	Arg	Pro	Gly	Met	Gly	Trp	Thr	Glu	Asp	Leu	Pro	Pro	Met	Gly
				165					170					175	
Gly	Pro	Ser	Asn	Phe	Ala	Gln	Asn	Thr	Met	Pro	Tyr	Pro	Gly	Gly	Gln
			180					185	-				190		
Gly	Glu	Ala	Glu	Arg	Phe	Met	Thr	Pro	Arg	Val	Arg	Glu	Glu	Leu	Leu
		195					200					205			
Arg	His	Gln	Leu	Leu	Glu	Lys	Arg	Ser	Met	Gly	Met	Gln	Arg	Pro	Leu
	210					215					220				
Gly	Met	Ala	Gly	Ser	Gly	Met	Gly	Gln	Ser	Met	Glu	Met	Glu	Arg	Met
225					230					235					240
Met	Gln	Ala	His	Arg	Gln	Met	Asp	Pro	Ala	Met	Phe	Pro	Gly	Gln	Met
				245					250					255	
Ala	Gly	Gly	Glu	Gly	Leu	Ala	Gly	Thr	Pro	Met	Gly	Met	Glu	Phe	Gly
			260					265					270		
Gly	Gly	Arg	Gly	Leu	Leu	Ser	Pro	Pro	Met	Gly	Gln	Ser	Gly	Leu	Arg
		275					280				-	285			
Glu	Val	Asp	Pro	Pro	Met	Gly	Pro	Gly	Asn	Leu	Asn	Met	Asn	Met	Asn
	290					295					300				
Val	Asn	Met	Asn	Met	Asn	Met	Asn	Leu	Asn	Val	Gln	Met	Thr	Pro	Gln
305					310					315					320
Gln	Gln	Met	Leu	Met	Ser	Gln	Lys	Met	Arg	Gly	Pro	61 y	Asp	Leu	Met
				325					330					335	
Gly	Pro	Gln	Gly	Leu	Ser	Pro	Glu	Glu	Met	Ala	Arg	Val	Arg	Ala	Gln
			340					345					350		
Asn	Ser	Ser	Gly	Val	Met	Gly	Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser
		355					360				,	365			
Gln	Phe	Pro	Asn	Gln	Gly	Gln	Gln	Gly	Phe	Ser	Gly	Gly	G1n	G1 y	Pro
	370					375					380				
Tyr	Gln	Ala	Met	Ser	Gln	Asp	Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser
385					390					395					400

Pro	Asp	Gln	Ser	Ser	Met	Pro	Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu
				405					410					415	
Ser	His	Met	Pro	Leu	Pro	Pro	Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His
			420					425					430		
Ser	Ala	Pro	Asn	Arg	Gly	Leu	Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Пe
		435					440					445			
Ser	He	Asn	Gln	Met	Gly	Ser	Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro
	450					455					460				
Thr	Leu	Ser	Gln	Val	His	Ser	Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn
465					470					475					480
Leu	Lys	Ser	Pro	Gln	Thr	Pro	Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala
				485					490					495	
Asn	Pro	Pro	Gly	Pro	Leu	Lys	Ser	Pro	Gln	Va]	Leu	Gly	Ser	Ser	Leu
			500					505					510		
Ser	Val	Arg	Ser	Pro	Thr	Gly	Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser
		515					520					525			
Met	Ala	Val	Pro	Ser	Pro	Gly	Trp	Val	Ala	Ser	Pro	Lys	Thr	Ala	Met
	530					535					540				
Pro	Ser	Pro	Gly	Val	Ser	Gln	Asn	Lys	Gln	Pro	Pro	Leu	Asn	Met	Asn
545					550					555					560
Ser	Ser	Thr	Thr	Leu	Ser	Asn	Met	Glu	Gln	Gly	Thr	Leu	Pro	Pro	Ser
				565					570					575	
Gly	Pro	Arg	Ser	Ser	Ser	Ser	Ala	Pro	Pro	Ala	Asn	Pro	Pro	Ser	Gly
			580					585					590		
Leu	Met	Asn	Pro	Ser	Leu	Pro	Phe	Thr	Ser	Ser	Pro	Asp	Pro	Thr	Pro
		595					600					605			
Ser	Gln	Asn	Pro	Leu	Ser	Leu	Met	Met	Thr	Gln	Met	Ser	Lys	Tyr	Ala
	610					615					620				
Met	Pro	Ser	Ser	Thr	Pro	Leu	Tyr	His	Asn	Ala	lle	Lys	Thr	He	Ala
625					630					635					640
Thr	Ser	Asp	Asp	Glu	Leu	Leu	Pro	Asp	Arg	Pro	Leu	Leu	Pro	Pro	Pro
				645					650					655	
Pro	Pro	Pro	Gln	Gly	Ser	Gly	Pro	Gly	lle	Ser	Asn	Ser	Gln	Pro	Ser
			660					665					670		
Gln	Met	His	Leu	Asn	Ser	Ala	Ala	Ala	Gln	Ser	Pro	Met	Gly	Met	Asn
		675					680					685			

Leu	Pro	Gly	Gln	Gln	Pro	Leu	Ser	His	Glu	Pro	Pro	Pro	Ala	Met	Leu
	690					695					700				
Pro	Ser	Pro	Thr	Pro	Leu	Gly	Ser	Asn	He	Pro	Leu	His	$P_{\Gamma O}$	Asn	A1a
705					710					715					720
Gln	Gly	Thr	Gly	Gly	Pro	Pro	Gln	Asn	Ser	Met	Met	Met	Ala	Pro	Gly
				725					730					735	
Gly	Pro	Asp	Ser	Leu	Asn	Ala	Pro	Cys	Gly	Pro	Val	Pro	Ser	Ser	Ser
			740					745					750		
Gln	Met	Met	Pro	Phe	Pro	Pro	Arg	Leu	Gln	Gln	Pro	His	Gly	Ala	Met
		755					760					765			
Λla	Pro	Thr	Gly	Gly	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Gln	Gln	His	Tyr
	770					775					780				
Pro	Ser	Gly	Met	Ala	Leu	Pro	Pro	Glu	Asp	Leu	Pro	Asn	Gln	Pro	Pro
785					790					795					800
61y	Pro	Met	Pro	Pro	Gln	Gln	His	Leu	Met	Gly	Lys	Ala	Met	Ala	Gly
,				805					810					815	
Arg	Met	Gly	Asp	Ala	Tyr	Pro	Pro	Gly	Val	Leu	Pro	Gly	Val	Ala	Ser
			820					825					830		
Val	Leu	Asn	Asp	Pro	Glu	Leu	Ser	Glu	Val	Ile	Arg	Pro	Thr	Pro	Thr
		835					840					845			
Gly	He	Pro	Glu	Phe	Asp	Leu	Ser	Arg	He	He	Pro	Ser	Trp	Phe	Leu
	850					855					860				
Arg	Thr	Arg	Pro	Phe	Ser	Phe	Cys	Leu	Tyr	Leu	Leu	Arg	Пе	Leu	Ser
865					870					875					880
Leu	Leu	Met	Trp	Leu	Thr	Pro	Leu	Pro	Pro	Leu	Pro	Ala	Gly	Gly	Trp
				885					890					895	
Pro	Gly	Gly	Gln	Val	Pro	Ala	Gly	Ala	Val	Asn	Arg	Ala	Leu	Arg	Phe
			900					905					910		
Cys	Ala	Gly	Leu	Cys	Val	Cys	Cys	He	Ser	Val	Phe				
		915					920								

<211> 428

<212> PRT

<213> Homo sapiens

<40	0> 3	3283													
Met	Ser	Ser	Gly	Leu	Arg	Ala	Λla	Asp	Phe	Pro	Arg	Trp	Lys	Arg	Hi:
l				5					10					15	
Пе	Ser	Glu	Gln	Leu	Arg	Arg	Arg	Asp	Arg	Leu	Gln	Arg	Gln	Ala	Phe
			20					25					30		
Glu	Glu	lle	He	Leu	G1n	Tyr	Asn	Lys	Leu	Leu	Glu	Lys	Ser	Asp	Lei
		35					40					45			
His	Ser	Val	Leu	Ala	Gln	Lys	Leu	Gln	Ala	Glu	Lys	His	Asp	Val	Pro
	50					55					60				
Asn	Arg	llis	Glu	He	Arg	Arg	Arg	Gln	Ala	Arg	Leu	Gln	Lys	Glu	Let
65					70					75					80
Ala	Glu	Ala	Ala	Lys	G]u	Pro	Leu	Pro	Val	Glu	Gln	Asp	Asp	Asp	116
				85					90					95	
Glu	Val	He		Asp	G1u	Thr	Ser	Asp	His	Thr	Glu	G] u	Thr	Ser	Pro
			100					105					110		
Val	Λrg		He	Ser	Arg	Ala		Thr	Lys	Arg	Leu		Gln	Pro	Ala
61	0.1	115			_		120					125			
Gly		Leu	Leu	Asp	Ser		Thr	Asn	lle	Phe		Arg	Arg	Ser	Val
C	130	DL.	D	V7 1	D	135			., .		140				_
	ser	Pne	Pro	vai		GIn	Asp	Asn	Val		lhr	His	Pro	Gly	
145 C15	Luc	C1	Vol	Λ	150	D	A I -	TL	A T .	155	C		D1		160
OIŸ	ris	oru	1 (1)	165	vai	1.1.0	Ала	Inr		Leu	Cys	vai	Phe		Ala
His	Asn	Glv	Glu		Aen	Δla	Val	Gla	170	Sor	Dro	C1	He	175	Car
1113	пор	O1 y	180	v (31	11.511	W1 CI	vai	185	1116	361	110	Gry	190	IIII	261
Пe	Glu	Phe		Ser	Ala	Glv	Ser		Leu	Len	Ala	Ala	Ser	Asn	Asn
		195	, , .			·	200		200	1200	7116	205	561	71.511	пор
Phe	Ala	Ser	Arg	He	Trp	Thr		Asp	Asp	Tvr	Arg		Arg	His	Thr
	210		•		•	215		•		•	220				• • • •
Leu	Thr	G1y	His	Ser	Gly	Lys	Val	Leu	Ser	Ala		Phe	Leu	Leu	Asp
225					230					235					240
Asn	Ala	Arg	Пе	Val	Ser	G] y	Ser	His	Λsp	Arg	Thr	Leu	Lys	Leu	Тгр
				245					250					255	
Asp	Leu	Arg	Ser	Lys	Va]	Cys	Пe	Lys	Thr	Val	Phe	Λla	Gly	Ser	Ser
			260					265					270		

Cys Asn Asp lle Val Cys Thr Glu Gln Cys Val Met Ser Gly His Phe Asp Lys Lys Ile Arg Phe Trp Asp Ile Arg Ser Glu Ser Ile Val Arg Glu Met Glu Leu Leu Gly Lys lle Thr Ala Leu Asp Leu Asn Pro Glu Arg Thr Glu Leu Leu Ser Cys Ser Arg Asp Asp Leu Leu Lys Val 11e Asp Leu Arg Thr Asn Ala Ile Lys Gln Thr Phe Ser Ala Pro Gly Phe Lys Cys Gly Ser Asp Trp Thr Arg Val Val Phe Ser Pro Asp Gly Ser Tyr Val Ala Ala Gly Ser Ala Glu Gly Ser Leu Tyr 11e Trp Ser Val Leu Thr Gly Lys Val Glu Lys Val Leu Ser Lys Gln His Ser Ser Ser lle Asn Ala Val Ala Trp Ser Pro Ser Gly Ser His Val Val Ser Val Asp Lys Gly Cys Lys Ala Val Leu Trp Ala Gln Tyr

<210> 3284

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3284

 Met
 Arg
 Met
 Val
 Pro
 Met
 Glu
 Met
 Phe
 Asn
 Tyr
 Cys
 Ser
 Gln
 Leu
 Glu

 1
 5
 5
 10
 10
 15
 15

 Asp
 Glu
 Asn
 Ser
 Ser
 Ala
 Gly
 Leu
 Asp
 11e
 Pro
 Gly
 Pro
 Pro
 Cys
 Thr

 Lys
 Ala
 Ser
 Pro
 Glu
 Pro
 Ala
 Lys
 Pro
 Gly
 Ala
 Gln
 His
 Ser

 Heu
 Pro
 Thr
 Glu
 Ala
 Glu
 Ala
 Gly
 Glu
 Arg
 Glu
 Ala
 Ser
 His

50 55 60

Gly His Gly Asp His Cys Arg Gly Arg Val Arg Arg Arg Leu His His 70 75 65 Asp Gly Gly Gly Arg Cys Leu Trp Leu His Leu Arg Leu Pro His Gly 85 90 Gln Val Pro Pro Gly Ala Gln Lys Ala Pro Ala Pro Asp Gly Gly Pro 100 105 Arg Gly Arg Ala Arg Gly Pro Glu Ala Asp Leu Phe Cys Gly Leu Ser 120 125 115 Ala His Pro His Pro Ala Arg 130 135

<210> 3285

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3285

Met Glu His Phe Gly Ser Gly Leu Met Gly Glu Ser Pro Phe 11e Phe 10 5 Leu His Leu Gly Gln Leu His Ser Lys Glu Arg Asn Lys Gly His Val 25 Leu Pro Lys Ala Ser Gly Leu Thr Gly Gln Ser Gln Pro Phe Arg Glu 35 40 45 Gly Met Ser Pro Lys Glu Gly Ser Pro Phe Phe Pro Glu His Pro Pro 55 60 Leu Ser Ala Glu Leu Leu Leu Pro Thr His Pro Ser Thr Ile Ala Leu

70 75 65 Ser Thr Val Cys Pro Cys Gln Asn Pro Ser Pro Thr Cys Leu Ala Trp

85 90 95

Tyr Pro Ser Leu Gly Gly Arg Gln 100

<210> 3286

<211> 140

Met Leu Gly 11e Ser Ala 11e Gly Gly Leu Cys Cys Leu His Arg Leu 1 5 10 15

Tyr Ser Cys 11e Pro Gly Glu Gly Gly Arg Ala Ala Lys Glu Lys Ser 20 25 30

Gln Ser Gln Gln Pro Ala Leu Arg Pro Ser Lys Leu Cys Thr Gly Gly
35 40 45

Leu Gly Ser Ala Leu Trp Ala Arg Gly Ala Gly Lys Arg Ala Gly Arg 50 55 60

Gly Thr Ala Ala Thr Ser Ala Arg Ala Ala Gln Glu Ala Pro Pro Tyr 65 70 75 80

Thr Ala Leu Gln Val Pro Gln Arg Glu Gln Pro Met Leu Pro Lys His
85 90 95

Pro Leu His Thr His Gln Gly Ser Trp Arg Arg Glu Val Pro Gln Gly
100 105 110

Lys Ala Pro Ser Pro Arg Arg Ala Ser Gly Pro Gly Leu Leu Trp Leu 115 120 125

Pro Thr Ala Ile Ile Ser Ile Tyr Arg Ala Gln Ser 130 135 140

<210> 3287

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3287

Met Ser Leu Leu Pro Asn Ser His Gln 11e Phe Leu 11e Glu Phe Leu 1 5 10 15

Val Leu Val Pro Asp Arg Thr Asn Asp Ser Pro Asn Leu Pro Val Phe 20 25 30

Met Arg Glu Lys Glu Lys Gly Ile Lys Gly Gly Arg Lys Lys Pro
35 40 45

Asn Ser Val Tyr Gly Glu Lys Gly Phe Cys Phe Ser Pro Asn Leu Gly 50 Gly Gly Arg Gly Gly Phe Ser Phe Tyr Phe Cys Phe Cys Phe Tyr Leu 65 70 75 80 Gly Phe Cys Phe Ser His Val Tyr Ser Ala Arg Ser Val Glu Gly Gly 85 90 Leu Gly Glu Gly Glu Leu Glu Lys Glu Leu Met Gly Ser Tyr Pro Gly 100 105 110 Leu

<210> 3288

<211> 209

<212> PRT

<213> Homo sapiens

115

<400> 3288

Met Lys Gly Gly Ala Gly Gly Ala Arg Pro Pro Pro Gly Arg Pro Val 10 Arg Ser Gly Ala Asn Ala lle Pro Gly Pro Thr Ala Arg Gly Arg Cys 25 Gly Pro Pro Asn Pro Pro Pro Arg Pro Gly Trp Gly Gly Gly Ala Gly 35 45 Gly Asp Gln Arg Leu Val Ser Leu Arg Ser Asp Leu Arg Gln Arg Gly 55 Arg Asp lle Met Thr Val Gly Ala Arg Leu Arg Ser Lys Ala Glu Ser 65 70 75 80 Ser Leu Leu Arg Arg Gly Pro Arg Gly Arg Gly Arg Thr Glu Gly Asp 90 Glu Glu Ala Ala Ala Ile Leu Glu His Leu Glu Tyr Ala Asp Glu Ala 105 Glu Ala Ala Ala Glu Ser Gly Thr Ser Ala Ala Asp Glu Arg Gly Pro

125 Gly Thr Arg Gly Ala Arg Arg Val His Phe Ala Leu Leu Pro Glu Arg 130 135 140

Tyr Glu Pro Leu Glu Glu Pro Ala Pro Ser Glu Gln Pro Arg Lys Arg
145

Tyr Arg Arg Lys Leu Lys Lys Tyr Gly Lys Asn Val Gly Lys Val 11e
165

Tyr Arg Gly Cys Arg Tyr Val Val 11e
180

Ala Tyr Ser Ala Pro Phe Ala Val Ala Thr Ser Val Val Ser Phe Val
195

Arg

<210> 3289

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3289 →

 Met Lys Ala Trp Ser Asn Ala Met Lys Ala Trp Ser Ser Gly Lys Pro Gln Asn

 1
 5
 10
 15

 Gly Val Ser Ser Trp Thr Ser Cys Ile Arg Val His Thr Pro Gln Gly 20
 25
 30

 Leu Asn Pro Cys Pro Leu Ser Lys Glu Leu Gly Leu Asn Ala Val Arg 35
 40
 45

 Asp Cys Leu Phe Val Val Ile Phe Ile Glu Arg Ser Ser Phe Pro Leu 50
 55
 60

 Pro Pro Trp Leu Ser Gln Leu Val Val Ile Ala Asp Ser Phe Pro Glu

Arg Thr Phe Asn Arg Phe Lys Lys Asn Val Leu Asp Trp Val Pro Lys 85 90 95

75

80

Lys Gln Ser Leu Lys Gln Gly Phe Val Cys Lys 100 105

70

<210> 3290

65

<211> 357

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<213> Homo sapiens
<400> 3290
Met Leu Gln Gln Ile Leu His Asp Met Tyr Ile Asp Pro Glu Leu Leu
Ala Glu Leu Ser Asp Val Gln Lys His lle Leu Phe Tyr Lys Met Arg
             20
                                                      30
                                 25
Glu Glu Gln Leu Arg Arg Trp Lys Glu Arg Glu Thr Trp Glu Ala Leu
                             40
Ala Gln Asp Glu Gly Leu Arg Pro Pro Lys Thr Lys Arg Ala Ala Ser
                         55
                                             60
Asp Lys His lle Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val
                     70
Trp Ile Met Gly Glu Gly Pro Gly Asp Lys Pro Tyr Glu Glu Ile Ser
                                     90
Glu Glu Leu Ile Ala Glu Arg Ala Arg Leu Gln Ala Gln Arg Glu Ala
            100
                                                     110
                                105
Glu Glu Leu Trp Arg Gln Lys Glu Ala Glu lle Thr Lys Lys Phe Arg
                            120
                                                 125
Asp Ala Leu Ala Asn Glu Lys Ala Arg Ile Leu Ala Glu Lys Trp Lys
                        135
Val Glu Met Glu Gly Arg Lys Ala Ala Lys Val Leu Glu Glu Arg lle
145
                    150
                                         155
                                                             160
His Glu Glu Phe Lys Arg Lys Glu Glu Glu Glu Arg Lys Arg Gly Glu
                165
                                    170
Glu Arg Ile Arg Leu Gln Glu Glu Gln Arg Ala Lys Glu Leu Tyr Trp
            180
                                185
                                                     190
Thr Leu Lys Gln Ala Gln Leu His Cys Gln Ala Ser Glu Lys Glu Glu
                            200
                                                 205
Arg Glu Trp Glu Glu Gln Leu Arg Arg Ser Lys Ala Ala Asp Glu Glu
                        215
                                             220
Arg Ser Arg Arg Ala Gln Arg Ala Arg Asp Glu Tyr Arg His His Ser
225
                    230
                                        235
                                                             240
```

Leu Arg Ala Ile Gln Lys Gly Thr Val Ala Gly Leu Ser Ser Met Phe

<212> PRT

Arg Glu Leu Gly Gln Ser His Glu Gln Glu Ala Arg Leu Tyr His His Leu Pro Asp Pro Gly Leu Pro Gln Pro Leu Ala Leu Pro Val Arg Thr Trp Glu Arg Pro Leu Arg Pro Val Ser Arg Asp Val Ile Val Arg Trp Phe Lys Glu Glu Gln Leu Pro Arg Arg Ala Gly Phe Glu Arg Asn Thr Lys Phe Ile Ala Pro Trp Phe His Gly Gly Asn Tyr His Cys Phe Arg Arg Arg Val Thr Ser Gly Thr Leu Arg Thr Glu Gly Gln Pro Thr Arg Leu Pro Ser Val Val

<210> 3291
<211> 158

<212> PRT

<213> Homo sapiens

<400> 3291

Met Gly Glu Ala Trp Phe Pro Glu Val Ala Pro Ser Leu Thr Ser Ser Leu Gly Trp Glu Trp Gly Phe Leu Trp Leu Cys Val Ala Pro Arg Gly Ala Val Ala Pro Ser Ser Phe Ser Leu Phe Ser Val Gly Arg Val Val Phe Leu Met Ser Pro Asn Ala Ser Thr Trp lle Phe Gln Leu Lys Met Leu Tyr Ser Leu Ala Ser Phe Val Pro Leu Cys Pro Phe Gly Ala Ser Leu Leu Glu Phe Ala Gly Gly Pro Leu Leu Thr Leu Phe Ala Trp Val

Ser Pro Ala Glu Ala Ala Lys Gln Gln Arg Leu Leu Pro Val Leu Ser

Ser Arg Ser Phe Asp Pro Val Gly His Leu Ser Asp Ala Ser Gln Ser Ser Pro Val Ser Gly Val Cys Arg Ser Lys Leu Glu Gly Ile Ser Gln Ser Val Tyr Met Gly Ile Arg Asp Pro Leu Glu Glu Ala Asp <210> 3292

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3292

Met Glu Met Ile Ala Phe Ala Arg Ile Phe Cys Lys Gly Gln Val Ser

Thr Ala Thr Phe Leu Glu Ser Cys Gly Val Ala Asp Leu Ile Thr Thr

Cys Tyr Gly Gly Arg Asn Arg Arg Val Ala Glu Ala Phe Ala Arg Thr

Gly Lys Thr Ile Glu Glu Leu Glu Lys Glu Met Leu Asn Gly Gln Lys

Leu Gln Gly Pro Gln Thr Ser Ala Glu Val Tyr Arg Ile Leu Lys Gln

Lys Gly Leu Leu Asp Lys Phe Pro Leu Phe Thr Ala Val Tyr Gln lle

Cys Tyr Glu Ser Arg Pro Val Gln Glu Met Leu Ser Cys Leu Gln Ser

His Pro Glu His Thr

<210> 3293

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3293

Met Trp Ser Lys Gly Trp IIe Val IIe Ser Lys Glu IIe His Cys Leu 1 5 10 15

Ile His Phe Lys Lys Gly Leu Thr Ser Gln Leu His Gly Met Arg Ser
20 25 30

Ala Ala Ser Asn Cys Gln Leu Leu Gln Ser Leu Leu Gln Leu Gln Lys
35 40 45

Asp Thr Val Leu Glu Val 11e Pro Phe Pro Cys Leu Val Thr Glu Val 50 55 60

Gln Leu Asn Val Ala Ala Lys Val Thr Leu Met Pro Met Gly Ser Lys
65 70 75 80

Lys Ser Lys Ser Leu Asn Arg IIe Leu Arg Asn Pro Lys Ser Val Phe 85 90 95

Phe Gln His Met Thr Phe Trp Ser Ser Leu Leu Phe Ser Asn Arg
100 105 110

<210> 3294

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3294

Met Gly Cys Ser Pro Leu Ala Cys Ser Ser Thr Pro Leu His Pro Ser

1 5 10 15

Leu Ser Phe Gly Arg Ser Ala 11e Gln Ser Cys His Leu Phe Arg Met 20 25 30

Thr Phe Pro Phe Arg Ala Arg Cys Val Arg Phe Pro Gly Met Phe Pro 35 40 45

Ser Ser Pro Ser Ser Ser Trp Pro Gly Pro Ala Cys His Leu His Ala 50 55 60

Gly Val Cys Asp Cys Leu Val Leu Thr Arg Gly Val Gly Trp Trp Ser
65 70 75 80

Thr Ser Leu Gly Arg Gly Leu Ile Arg Pro Gly Val Ser Arg Phe His

95 85 90 Ala Leu Ser Ile Pro Asp His 100 <210> 3295 <211> 111 <212> PRT <213> Homo sapiens <400> 3295 Met Val Tyr Ser Arg His Pro Lys Pro Val Ser Thr Ser His Lys Arg 1 5 10 15 His Val Ser His Arg Ala Gly Asn Pro Gly Pro Ser Pro Gly Thr Ser 20 25 Gly Pro Ile Ser Ala Pro Asp Leu Pro Cys Ser Leu Ala Trp Asp Leu 40 Ser Tyr Ser Trp Ala Val Asp His Val Pro Leu Pro Ala Leu Thr Cys 50 60 Pro Leu Thr Gly Asp Ser Glu Gly Pro His Leu Pro Arg Cys His Ser 70 75 Thr Trp His Leu Met Arg Lys Ala Thr Gln Arg Lys Gly Leu Tyr Ser 85 90 95 Ser Asp Phe Arg Gly Lys Thr Thr Gln Met Lys Gly Thr Thr Ile 100 105 110 <210> 3296 <211> 144 <212> PRT <213> Homo sapiens <400> 3296 Met Gly Val Ala Arg Met Gly Ser His Gly Ser Val Arg Ala Glu Ala

Arg Phe Glu Leu Arg Pro Thr Pro Arg His Ser Ala Cys Tyr Pro Gly

		20					25					30		
Pro	Pro	Pro	Gly	Cys	His	His	His	Ala	Arg	Gly	Ala	Ala	Ser	Pro
	35					40					45			
Arg	Ser	Asp	His	Tyr	Phe	His	Ala	Ser	Cys	Gly	Asp	Glu	Gly	Thr
50					55					60				
Ser	His	Arg	Leu	Arg	Phe	Gln	Arg	Arg	Asn	Leu	Val	Ser	Glu	Asn
				70					75					80
Ala	Leu	Arg	۸rg	Ala	Gly	Ala	Glu	Arg	Ser	Arg	His	Trp	Pro	Glu
			85					90					95	
G1y	Leu	Ser	Thr	Tyr	Lys	Pro	Thr	Glu	Ala	Ser	Val	Ser	Val	Val
		100					105					110		
Phe	Val	Va]	Ser	G1n	Ala	Leu	Gly	Ser	Trp	Leu	Gly	Val	Arg	Val
	115					120					125			
Ser	Ser	Thr	Cys	Lys	Gln	Gly	Cys	Leu	Pro	Leu	Ser	Thr	Leu	Ala
130					135					140				
	Arg 50 Ser Ala Gly Phe	35 Arg Ser 50 Ser His Ala Leu Gly Leu Phe Val 115 Ser Ser	Pro Pro Pro 35 Arg Ser Asp 50 Ser His Arg Ala Leu Arg Gly Leu Ser 100 Phe Val Val 115 Ser Ser Thr	Pro Pro Gly 35	Pro Pro Gly Cys 35	Pro Pro Gly Cys His 35 35 Tyr Phe 50 55 55 Ser His Arg Leu Arg Phe Ala Leu Arg Arg Ala Gly Ala Leu Ser Thr Tyr Lys Bhe Val Val Ser Gln Ala 115 Tyr Cys Lys Gln	Pro Pro Gly Cys His His 35	Pro Pro Gly Cys His His His 35	Pro Pro Gly Cys His His His Ala 40	Pro Pro Pro Gly Cys His His His Ala Arg Arg Ser Asp His Tyr Phe His Ala Ser Cys 50 Tyr Fro Fro His Arg Phe His Arg Asn As	Pro Pro Pro Gly Cys His His His Ala Arg Gly Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly 50 Tr Tr 55 Tr Arg Arg <td>Pro Pro Pro Gly Cys His His Ala Arg Gly Ala 35 </td> <td>Pro Pro Pro Gly Cys His His Ala Arg Gly Ala Ala Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly Asp Glu Ser His Arg His Phe Gln Arg Arg Asp Leu Val Ser Ala Leu Arg Phe Gln Arg Arg Asp Leu Val Ser Ala Leu Arg Arg Ala Gly Ala Glu Arg Arg His Trp Ala Leu Arg Arg Ala Gly Ala Glu Arg Arg His Trp Ala Leu Arg A</td> <td>Pro Pro Pro Gly Cys His His His Ala Arg Gly Ala Ala Ser Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly Asp Glu Gly Ser His Arg Leu Arg Phe Gln Arg Arg Asp Glu Arg A</td>	Pro Pro Pro Gly Cys His His Ala Arg Gly Ala 35	Pro Pro Pro Gly Cys His His Ala Arg Gly Ala Ala Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly Asp Glu Ser His Arg His Phe Gln Arg Arg Asp Leu Val Ser Ala Leu Arg Phe Gln Arg Arg Asp Leu Val Ser Ala Leu Arg Arg Ala Gly Ala Glu Arg Arg His Trp Ala Leu Arg Arg Ala Gly Ala Glu Arg Arg His Trp Ala Leu Arg A	Pro Pro Pro Gly Cys His His His Ala Arg Gly Ala Ala Ser Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly Asp Glu Gly Ser His Arg Leu Arg Phe Gln Arg Arg Asp Glu Arg A

<210> 3297

<211> 319

<212> PRT

<213> Homo sapiens

<400> 3297

Met Thr Leu Ala Ser His Pro Arg Pro Glu Gly Leu His Ser Arg Gln

1 5 10 15

Trp Ser Gly Ser Gln Asp Ser Gln Met Gly Phe Pro Arg Ala Asp Pro

20 25 30

Ala Ser Asp Arg Ala Ser Leu Phe Val Ala Arg Thr Arg Arg Ser Asn 35 40 45

Ser Ser Glu Ala Leu Leu Val Asp Arg Ala Ala Gly Gly Gly Ala Gly 50 55 60

Ser Pro Pro Ala Pro Leu Ala Pro Ser Ala Ser Gly Pro Pro Val Cys 65 70 75 80

Lys Ser Ser Glu Val Leu Tyr Glu Arg Pro Gln Pro Thr Pro Ala Phe 85 90 95

Ser Ser Arg Thr Ala Gly Pro Pro Asp Pro Pro Arg Ala Ala Arg Pro

			100					105					110		
Ser	Ser	Ala	Ala	Pro	Ala	Ser	Arg	Gly	Ala	Pro	Arg	Leu	Pro	Pro	Val
		115					120					125			
Cys	Gly	Asp	Phe	Leu	Leu	Asp	Tyr	Ser	Leu	Asp	Arg	Gly	Leu	Pro	Arg
	130					135					140				
Ser	Gly	Gly	Gly	Thr	Gly	Trp	Gly	Glu	Leu	Pro	Pro	Ala	Ala	Glu	Val
145					150					155					160
Pro	Gly	Pro	Leu	Ser	Arg	Arg	Asp	G1 y	Leu	Leu	Thr	Met	Leu	Pro	Gly
				165					170					175	
Pro	Pro	Pro	Val	Tyr	Ala	Ala	Asp	Ser	Asn	Ser	Pro	Leu	Leu	Arg	Thr
			180					185					190		
Lys	Asp	Pro	His	Thr	Arg	Ala	Thr	Arg	Thr	Lys	Pro	Cys	Gly	Leu	Pro
		195					200					205			
Pro	Glu	Ala	Ala	Glu	Gly	Pro	Glu	Val	His	Pro	Asn	Pro	Leu	Leu	Trp
	210					215					220				
Met	Pro	Pro	Pro	Thr	Arg	He	Pro	Ser	Ala	Gly	Glu	Arg	Ser	Gly	His
225					230					235					240
Lys	Asn	Leu	Ala	Leu	Glu	Gly	Leu	Arg	Asp	Trp	Tyr	Ile	Arg	Asn	Ser
				245					250					255	
Gly	Leu	Ala	Ala	Gly	Pro	Gln	Arg	Arg	Pro	Val	Leu	Pro	Ser	Val	Gly
			260					265					270		
Pro	Pro	His	Pro	Pro	Phe	Leu	His	Ala	Arg	Cys	Tyr	Glu	Val	Gly	Gln
		275					280					285			
Ala	Leu	Tyr	G1 y	Ala	Pro	Ser	Gln	Ala	Pro	Leu	Pro	His	Ser	Arg	Ser
	290					295					300				
Phe	Thr	Ala	Pro	Pro	Val	Ser	G1 y	Arg	Tyr	Gl y	Gly	Cys	Phe	Tyr	
305					310					315					

<210> 3298

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3298

Met Ile Val Glu His Leu Ser Glu Pro Lys Ser Leu Gly Glu Cys Gly

Asp Phe Leu Glu Gly Gly Cys Arg Leu Pro Glu Ser Pro Pro Asn Gly Arg Ala Glu Lys Gly Glu Gly Gly Gly Gly Cys Ser Gln Glu Gly Ala Arg Glu Glu Gln Gly Leu Gly Ala Ser Arg Asn Met Pro Ala Val Gly Gly Arg Gly Arg Gly Ala Thr Val Asn Gly Phe Pro Ser Glu Val Val Gly Ala Asp Gly Ser Phe Cys Leu Leu Ala Leu Lys Arg Val Phe Cys Gln Gly His Ser Leu Phe Leu Leu Arg Lys His Pro Pro Asn Ala Asn Asn Ile Pro Thr Ser Cys

<210> 3299

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3299

Asp Gly Glu Gly Gly Ala Leu Ala Lys Gly Ala Leu Pro Tyr Gln

Pro Gly Leu Leu Lys Arg Gly Asp Phe Glu Trp Val Thr Ser Pro Ala Trp Ala Arg Ser Val Glu Gly Gly Pro Ala Gln Arg Val Asn Arg Leu Glu Val Cys Asp Gln Gly Gln Pro Ala Val Arg Ala Cys Gly Arg <210> 3300 <211> 461 <212> PRT <213> Homo sapiens <400> 3300 Met Gly Asp Arg Ser Gly Gln Gln Glu Arg Ser Val Pro His Ser Pro Gly Ala Pro Val Gly Thr Ser Ala Ala Ala Val Asn Glu Leu Leu His Asn Gly Phe His Pro Pro Pro Val Gln Pro Pro His Val Cys Ser Arg Gly Pro Val Gly Gly Ser Asp Ala Ala Pro Gln Arg Leu Pro Leu Leu Pro Glu Leu Gln Pro Gln Pro Leu Leu Pro Gln His Asp Ser Pro Ala Lys Lys Cys Arg Leu Arg Arg Arg Met Asp Ser Gly Arg Lys Asn Arg Pro Pro Phe Pro Trp Phe Gly Met Asp Ile Gly Gly Thr Leu Val Lys Leu Val Tyr Phe Glu Pro Lys Asp Ile Thr Ala Glu Glu Glu Glu Glu Glu Val Glu Asn Leu Lys Ser lle Arg Lys Tyr Leu Thr Ser Asn Thr Ala Tyr Gly Lys Thr Gly lle Arg Asp Val His Leu Glu Leu Lys Asn

Leu Thr Met Cys Gly Arg Lys Gly Asn Leu His Phe Ile Arg Phe Pro

				165					170					175	
Ser	Cys	Ala	Met	His	Arg	Phe	He	Gln	Met	G1 y	Ser	Glu	Lys	Asn	Phe
			180					185					190		
Ser	Se.r	Leu	His	Thr	Thr	Leu	Cys	Ala	Thr	G1 y	Gly	Gly	Ala	Phe	Lys
		195					200					205			
Phe	Glu	Glu	Asp	Phe	Arg	Met	lle	Ala	Asp	Leu	Gln	Leu	His	Lys	Leu
	210					215					220				
Asp	Glu	Leu	Asp	Cys	Leu	lle	Gln	G1 y	Leu	Leu	Tyr	Val	Asp	Ser	Va]
225					230					235					240
Gly	Phe	Asn	Gly	Lys	Pro	Glu	Cys	Tyr	Tyr	Phe	Glu	Asn	Pro	Thr	Asn
				245					250					255	
Pro	Glu	Leu	Cys	Gln	Lys	Lys	Pro	Tyr	Cys	Leu	Asp	Asn	Pro	Tyr	Pro
			260					265					270		
Met	Leu	Leu	Va]	Asn	Met	Gly	Ser	Gly	Val	Ser	He	Leu	Ala	Val	Tyr
		275					280					285			
Ser	Lys	Asp	Asn	Tyr	Lys	Arg	Val	Thr	Gly	Thr	Ser	Leu	Gly	Gly	Gly
	290					295					300				
Thr	Phe	Leu	Gly	Leu	Cys	Cys	Leu	Leu	Thr	Gly	Cys	Glu	Thr	Phe	Glu
305					310					315					320
Glu	Ala	Leu	Glu	Met	Ala	Ala	Lys	Gly	Asp	Ser	Thr	Asn	Val	Asp	Lys
				325					330					335	
Leu	Val	Lys	Asp	He	Tyr	Gly	Gly	Asp	Tyr	Glu	Arg	Phe	Gly	Leu	Gln
			340					345					350		
Gly	Ser	Ala	Val	Ala	Ser	Ser	Phe	Gly	Λsn	Met	Met	Ser	Lys	Glu	Lys
		355					360					365			
Arg	Asp	Ser	Пе	Ser	Lys	Glu	Asp	Leu	Ala	Arg	Ala	Thr	Leu	Val	Thr
	370					375					380				
He	Thr	Asn	Asn	He	Gly	Ser	He	Ala	Arg	Met	Cys	Ala	Leu	Asn	Glu
385					390					395					400
Asn	11e	Asp	Arg	Val	Val	Phe	Val	G1 y	Asn	Phe	Leu	Arg	He		Met
				405					410					415	
Val	Ser	Met	Lys	Leu	Leu	Ala	Tyr		Met	Asp	Phe	Trp		Lys	Gly
			420					425					430		
Gln	Leu		Ala	Leu	Phe	Leu		His	Glu	Gly	Tyr		Gly	Ala	Va1
		435					440					445			
Glv	Ala	1 611	Len	Glu	1 611	Phe	l v c	Met	Thr	Asn	Asn	Ινς			

450 455 . 460

<210> 3301

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3301

Met Thr Val Leu His Tyr Leu Asp Ser Ala Gln Glu Ala Thr Met Met

1 5 10 15

Tyr Gln Tyr Ser Gln His Leu Asp Asp Val Thr Leu Leu Cys Leu Gly
20 25 30

Pro Val Tyr 11e Val Tyr Glu Thr Tyr Val Trp Val His His Leu Val
35 40 45

Asp Val Thr Leu Leu His Gly Leu Cys Pro Trp Arg Cys Glu Ile Phe 50 55 60

Phe His Ser Ser Pro Ala 11e Ser Leu Leu Cys Leu Phe Cys Leu Gly
65 70 75 80

Leu Ala Lys Lys Arg Ile Ile Val Tyr His Trp Thr Gln Asn Leu Gly
85 90 95

Glu Val Thr Pro IIe Leu Pro Gly Ala His IIe Phe Gly Tyr Cys Asp 100 105 110

lle Gly Asp Gly Trp Glu Ala His Glu Trp Ala Leu Leu Thr Glu Gly
115 120 125

Leu Val Thr Ser Gln His Ser Leu Pro Arg Lys Cys Asp Tyr Cys Leu 130 135 140

Pro Phe Ala Pro Cys Leu Gln Gly Arg Leu

145 150

<210> 3302

<211> 183

<212> PRT

<213> Homo sapiens

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<210> 3303

<211> 650

<212> PRT

<213> Homo sapiens

<400>. 3303

Met Ala Arg Ser Pro Thr Thr His Pro Pro Ala Asn Thr Tyr Leu Pro

1 5 10 15

Gln Tyr Gly Gly Tyr Gly Ala Gly Gln Ser Val Phe Ala Pro Thr Lys

			20					25					30		
Pro	Phe	Thr	Gly	Gln	Asp	Cys	Ala	Asn	Ser	Lys	Asp	Cys	Ser	Phe	Ala
		35					40					45			
Tyr	Gly	Ser	Gly	Asn	Ser	Leu	Pro	Ala	Ser	Pro	Ser	Ser	Ala	His	Ser
	50					55					60				
Ala	Gly	Tyr	Λ1а	Pro	Pro	Pro	Thr	Gly	Gly	Pro	Cys	Leu	Pro	Pro	Ser
65					70					75					80
Lys	Ala	Ser	Phe	Phe	Ser	Ser	Ser	Glu	G1 y	Ala	Pro	Phe	Ser	Gly	Ser
				85					90					95	
Ala	Pro	Thr	Pro	Leu	Arg	Cys	Asp	Ser	Arg	Ala	Ser	Thr	Val	Ser	Pro
			100					105					110		
Gly	Gly	Tyr	Met	Val	Pro	Lys	G1 y	Thr	Thr	Ala	Ser	Ala	Thr	Ser	Ala
		115					120					125			
Ala	Ser	Ala	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Phe	Gln	Pro	Ser	Pro	G]u
	130					135					140				
Asn	Cys	Arg	Gln	Phe	Ala	Gly	Ala	Ser	Gln	Trp	Pro	Phe	Arg	Gln	Gly
145					150			•		155					160
Tyr	Gly	Gly	Leu	Asp	Trp	Ala	Ser	Glu	Ala	Phe	Ser	Gln	Leu	Tyr	Asn
				165					170					175	
Pro	Ser	Phe	Asp	Cys	His	Val	Ser	G] u	Pro	Asn	Val	He		Asp	He
			180					185					190		
Ser	Asn	Tyr	Thr	Pro	Gln	Lys	Val	Lys	Gln	Gln	Thr		Val	Ser	Glu
		195					200					205			,, ,
Thr		Ser	Glu	Ser	Ser	Ser	Asp	Ser	Thr	Gin		Asn	GIn	Pro	Val
	210				12.	215				0.1	220	C	C	C	C1
		Gly	Gly	Phe		Arg		Asn	Ser				Ser	Ser	
225		C	C	,		6		C1	1		Mai		A = m	Т	240
GIy	G1n	Ser	Ser		Ser	Ser	Leu	61u	Lys 250	ren	мет	мет	ASP	255	ASII
C1	۸1.	C	C	245	Dua	C1	Т	1.25		Aan	Cla	San	Val		Pho
610	Ala	Ser		ATA	Pro	Gly	1 y 1	265	пр	ASH	0111	261	270	Leu	1 116
Cla	Can	Som	260 Sav	lve	Dro	Gly	Λνα		Ara	Ara	Lve	1 ve		Aen	l eu
0111	Set	275		rys	1.10	OTY	280	OIŸ	ш	мg	12,5	285		пор	1500
Pho	Glu			Hic	Lou	Gly		Pro	The	Sor	Ala			Ala	Ala
1116	290		561	1113	ווייטיי	295		. 10	1111	JC1	300		.,, .		, , , , ,
Ser			Pro	Ser	lvs	Arg		Thr	Glv	Pro			Pro	Arg	Glv

305					310					315					320
Gly	Arg	Gly	Gly	Gly	Ala	Cys	Ser	Ala	Lys	Lys	Glu	Arg	Gly	Gly	Ala
				325			·		330					335	
Лlа	Ala	Lys	Ala	Lys	Phe	He	Pro	Lys	Pro	Gln	Pro	Val	Asn	Pro	Leu
			340					345					350		
Phe	Gln	Asp	Ser	Pro	Asp	Leu	Gly	Leu	Asp	Tyr	Tyr	Ser	Gly	Asp	Ser
		355					360					365			
Ser	Met	Ser	Pro	Leu	Pro	Ser	Gln	Ser	Arg	Ala	Phe	Gly	Val	Gly	Glu
	370					375					380				
Arg	Asp	Pro	Cys	Asp	Phe	lle	Gly	Pro	Tyr	Ser	Met	Asn	Pro	Ser	Thr
385					390					395					400
Pro	Ser	Asp	Gly	Thr	Phe	Gly	Gln	Gly	Phe	His	Cys	Asp	Ser	Pro	Ser
				405					410					415	
Leu	Gly	Ala	Pro	Glu	Leu	Asp	Gly	Lys	His	Phe	Pro	Pro	Leu	Ala	His
			420					425					430		
Pro	Pro	Thr	Val	Phe	Asp	Ala	Gly	Leu	Gln	Lys	Ala	Tyr	Ser	Pro	Thr
		435					440					445			
Cys	Ser	Pro	Thr	Leu	Gly	Phe	Lys	Glu	Glu	Leu	Arg	Pro	Pro	Pro	Thr
	450					455					460				
Lys	Leu	Ala	Ala	Cys	Glu	Pro	Leu	Lys	His	Gly	Leu	Gln	Gly	Ala	Ser
465					470					475					480
Leu	Gly	His	Ala	Ala	Ala	Ala	Gln	Ala	His	Leu	Ser	Cys	Arg	Asp	Leu
				485					490					495	
Pro	Leu	Gly	Gln	Pro	His	Tyr	Asp	Ser	Pro	Ser	Cys	Lys	Gly	Thr	Ala
		•	500					505					510		
Tyr	Trp	Tyr	Pro	Pro	Gly	Ser	Ala	Ala	Arg	Ser	Pro	Pro	Tyr	Glu	Gly
		515					520					525			
Lys	Val	Gly	Thr	Gly	Leu	Leu	Ala	Asp	Phe	Leu	Gly	Arg	Thr	Glu	Ala
	530					535					540				
Ala	Cys	Leu	Ser	Ala	Pro	His	Leu	Ala	Ser	Pro	Pro	Ala	Thr	Pro	Lys
545					550					555					560
Ala	Asp	Lys	Glu	Pro	Leu	Glu	Met	Ala	Arg	Pro	Pro	Gly	Pro	Pro	Arg
				565					570					575	
Gly	Pro	Ala	Ala	Ala	Ala	Ala	Gly	Tyr	Gly	Cys	Pro	Leu	Leu	Ser	Asp
			580	,				585					590		
Leu	Thr	Leu	Ser	Pro	Val	Pro	Aro	Asn	Ser	Leu	Len	Pro	Leu	Gln	Asp

Thr Ala Tyr Arg Tyr Pro Gly Phe Met Pro Gln Ala His Pro Gly Leu Gly Gly Gly Pro Lys Ser Gly Phe Leu Gly Pro Met Ala Glu Pro His Pro Glu Asp Thr Phe Thr Val Thr Ser Leu <210> 3304 <211> 893 <212> PRT <213> Homo sapiens <400> 3304 Met Gly Arg Met Gly Lys Gly Cys Pro Ala Ser Gly Pro Arg Ser Trp Leu Leu Ser Asp Glu Leu Val Gln Gly Ser Arg Ala Gly Val Ser Ala Ser Phe Pro Val Gly Phe Arg Glu Gly Gly Gly Gly Asp Phe Arg Arg Gly Asp Val Gly Leu Gln Asp Gly Gly Val Arg Val Arg Val Ile lle Phe Ala Phe Ser Leu His Ser Leu Leu Ser Arg Phe Leu Pro Gly Gly Asp Ala Ser Leu Met Glu Leu Glu Lys Arg Lys Glu Asn Arg Phe Val Glu Arg Gln Ser lle Val Pro Leu Arg Leu lle Tyr Arg Ser Gly Gly Glu Asp Glu Ser Arg His Asp Ala Leu Asp Thr Arg Val Arg Gly Asp Leu Gly Gly Arg Gln Leu Thr His Val Asp Gln Ala Ser Phe Gln Val Asp Ala Phe Gly Thr Ser Phe Ile Leu Asp Val Val Leu Asn His

Asp Leu Leu Ser Ser Glu Tyr Ile Glu Arg His Ile Glu His Gly Gly

				165					170					175	
Lys	Thr	Val	Glu	Val	Lys	Gly	Gly	Glu	His	Cys	Tyr	Tyr	Gln	Gly	His
			180					185					190		
11e	۸rg	Gly	Asn	Pro	Asp	Ser	Phe	Val	Ala	Leu	Ser	Thr	Cys	His	Gly
		195					200					205			
Leu	His	Gly	Met	Phe	Tyr	Asp	Gly	Asn	His	Thr	Tyr	Leu	Пe	Glu	Pro
	210					215					220				
Glu	Glu	Asn	Asp	Thr	Thr	Gln	Glu	Asp	Phe	His	Phe	His	Ser	Val	Tyr
225					230					235					240
Lys	Ser	Arg	Leu	Phe	Glu	Phe	Ser	Leu	Asp	Asp	Leu	Pro	Ser	Glu	Phe
				245					250					255	
Gln	Gln	Val	Asn	He	Thr	Pro	Ser	Lys	Phe	lle	Leu	Lys	Pro	Arg	Pro
			260					265					270		
Lys	Arg		Lys	Arg	Gln	Leu	Arg	۸rg	Tyr	Pro	Arg	Asn	Val	Glu	Glu
		275					280					285			
Glu		Lys	Tyr	He	Glu		Met	lle	Val	Asn		His	Leu	Met	Phe
	290				_	295					300	_		_	_
	Lys	llis	Arg	Leu		Val	Val	His	Thr		Thr	Tyr	Ala	Lys	
305	17 1		14 .	. 1	310		3.1	Tr.		315	6.1	,	,	TO I	320
val	vai	Asn	Met		Asp	Leu	lle	lyr		Asp	Gin	Leu	Lys		Arg
11.	V ~ 1	Lau	Val	325	Mat	C1	Than	Tun	330	Thu	A	lan	Luc	335	۸1.
116	val	Leu	340	Ala	Met	Giu	Thr	345	Ala	IIII	ASP	ASII	350	rne	мта
110	Sor	Glu		Pro	Lou	lla.	Thr		Ανσ	Clu	Pho	Mot		Tyr	Ara
116	361	355	лэн	110	Leu	110	360	Leu	AI g	O i u	THE	365	ris	1 9 1	MIG
Arø	Asn		Πe	lvs	Glu	lvs	Ser	Asn	Ala	Val	llis		Phe	Ser	Glv
6	370		110	2,0	0.4						380	.50 G			. ,
Ser		Phe	Glu	Ser	Ser	Arg	Ser	Glv	Ala	Ala		He	Glv	Glv	lle
385					390			•		395			•	•	400
	Ser	Leu	Leu	Lys	Gly	Gly	Gly	Val	Asn	Glu	Phe	Gly	Lys	Thr	Asp
				405			-		410					415	
Leu	Met	Ala	Val	Thr	Leu	Ala	Gln	Ser	Leu	Ala	His	Asn	He	Gly	11e
			420					425					430		
He	Ser	Asp	Lys	Arg	Lys	Leu	Ala	Ser	Gly	Glu	Cys	Lys	Cys	Glu	Asp
		435					440					445			
Thr	Trp	Ser	Gly	Cys	lle	Met	Gly	Asp	Thr	Gly	Tyr	Tyr	Leu	Pro	Lys

	450					455					460				
Lys	Phe	Thr	Gln	Cys	Asn	He	Glu	Glu	Tyr	His	Asp	Phe	Leu	Asn	Ser
465					470					475					480
Gly	Gly	Gly	Ala	Cys	Leu	Phe	Asn	Lys	Pro	Ser	Lys	Leu	Leu	Asp	Pro
				485					490					495	
Pro	Glu	Cys	Gly	Asn	Gly	Phe	11e	Glu	Thr	Gly	Glu	Glu	Cys	Asp	Cys
			500					505					510		
Gly	Thr	Pro	Ala	Glu	Cys	Val	Leu	Glu	Gly	Ala	Glu	Cys	Cys	Lys	Lys
		515					520					525			
Cys	Thr	Leu	Thr	Gln	Asp	Ser	Gln	Cys	Ser	Asp	Gly	Leu	Cys	Cys	Lys
	530					535					540				
Lys	Cys	Lys	Phe	Gln	Pro	Met	Gly	Thr	Val	Cys	Arg	Glu	Ala	Val	Asn
545					550					555					560
Asp	Cys	Asp	He	Arg	Glu	Thr	Cys	Ser	Gly	Asn	Ser	Ser	Gln	Cys	Ala
				565					570					575	
Pro	Asn	lle	His	Lys	Met	Asp	Gly	Tyr	Ser	Cys	Asp	Gly	Val	Gln	Gly
			580					585					590		
Пе	Cys	Phe	Gly	Gly	Arg	Cys	Lys	Thr	Arg	Asp	Arg	Gln	Cys	Lys	Tyr
		595					600					605			
He	Trp	Gly	Gln	Lys	Val	Thr	Ala	Ser	Asp	Lys	Tyr	Cys	Tyr	Glu	Lys
	610					615					620				
	Asn	Ile	Glu	Gly	Thr	Glu	Lys	Gly	Asn		Gly	Lys	Asp	Lys	Asp
625					630					635					640
Thr	Trp	lle	Gln		Asn	Lys	Arg	Asp		Leu	Cys	Gly	Tyr		Leu
				645					650					655	
Cys	Thr	Asn		Gly	Asn	Hle	Pro		Leu	Gly	Glu	Leu		Gly	Glu
	mı		660		., ,		0.1	665	61		m		670	0	6
He	Thr		Thr	Leu	Val	Val		GIn	Gly	Arg	Ihr		Asn	Cys	Ser
C1	C1	675	V 1		,	61	680	•	W 1	Δ.	1	685	т	V . 1	C1
GIy		HIS	Vai	Lys	Leu	Glu	GIU	Asp	val	Asp		GIY	Lyr	val	6] u
	690	TI	D.	C	C1	695	C1	и.	M. 4	C	700	C1	112.	A	C
	GIŸ	ınr	Pro	Cys		Pro	GIN	Met	мет		Leu	GIU	H1S	Arg	
705	D	Ve 1	A 1 =	C	710	Λ	DI	C	TL	715	1	C	Care	1	720
Leu	r.ro	115.4	VIS		rne	۸sn	rne	ser	730	Cys	Leu	ser	ser		oru
C1v	Thr	Πa	Cve	725 Ser	G1v	Asn	C1v	Val		Sor	Acn	Clo	اما	735	Cvc
1111	1 (13)	1 1 1.7	1 . V ~		1111	71 5 11	1111	V 24 1	1.4		13.511		1 1-11	1 1	

Val Cys Asn Arg His Trp lle Gly Ser Asp Cys Asn Thr Tyr Phe Pro His Asn Asp Asp Ala Lys Thr Gly Ile Thr Leu Ser Gly Asn Gly Val Ala Gly Thr Asn Ile Ile Ile Gly Ile Ile Ala Gly Thr Ile Leu Val Leu Ala Leu Ile Leu Gly Ile Thr Ala Trp Gly Tyr Lys Asn Tyr Arg Glu Gln Arg Gln Leu Pro Gln Gly Asp Tyr Val Lys Lys Pro Gly Gly Gly Asp Ser Phe Tyr Ser Asp 11e Pro Pro Gly Val Ser Thr Asn Ser Ala Ser Ser Ser Lys Lys Arg Ser Asn Gly Leu Ser His Ser Trp Ser Glu Arg Ile Pro Asp Thr Lys His Ile Ser Asp 11e Cys Glu Asn Gly Arg Pro Arg Ser Asn Ser Trp Gln Gly Asn Leu Gly Gly

<210> 3305

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3305

 Met
 Phe
 Leu
 Gln
 Pro
 Ser
 Thr
 Pro
 Ser
 Ser
 Phe
 Ala
 Ser
 His
 Pro
 Ser

 1
 5
 5
 7
 10
 10
 15
 15

 Leu
 Leu
 His
 Leu
 Phe
 Ser
 Tyr
 Ile
 His
 Tyr
 Gly
 Phe
 Pro
 Phe
 Ph

Cys Ser Gly Pro Leu Gly Thr Ser His Gly Ser Val Phe Val Pro Gly Ala Leu Val Pro Gly Thr Arg Cys Ala Tyr Cys Ser Trp Gly Val Phe Ala Ser Cys Pro Ile Asp Asp <210> 3306 <211> 208 <212> PRT <213> Homo sapiens <400> 3306 Met Ser His Pro Ala Trp Thr Pro Cys Arg Ala Ser Pro Lys Arg Gln Trp Thr Gln Ala Gly Ser Ser Thr Cys Thr Pro Ala Leu Arg His Ala Phe Ser Leu Asp Val Ala Ser Ala Trp Val Leu Pro Leu Arg Thr Ser Arg Gly Ala Gly Gly Ala Ala Cys Cys His Pro His Trp Gly His Lys Thr Ser Ala Val Glu Gly Ala Gln Ser Gln Leu His Pro Gly Pro Ser Thr Ala Pro Arg Cys Gln Val Leu Leu Pro His Ser Pro Gly Pro Trp

Pro Ala Gly Ala Gly Ala Thr Pro Ala Trp Gly Pro Ala Glu Gly Gly

Trp Ala Ser Ser Gln Asp Pro Gln His Leu Leu Glu Arg Gly Gly
115 120 125

Arg Ala Ser Asp Pro Val Pro Ala Arg Trp Glu Gln Asp Thr Asp Gly

Phe Val Leu Met Ala Asn Ala Ser Glu Met Asp Arg Gln Ser His Pro

Val Ala Phe Thr Val Thr Ile Leu Pro Val Asn Gly Gln Pro Pro Thr

<210> 3307

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3307

Met Leu Thr Leu His Gly Ala Ser Ser Arg Phe Pro Gly Lys Ser Gly
1 5 10 15

Ser Arg Arg Ser Ser Leu Ile Ser Gln Pro Leu Trp Arg Glu Tyr 20 25 30

Gln Lys Gln Asp Glu Ser Gln Val Lys Ser Leu Ser Leu Gly Ser Pro 35 40 45

Lys Gly Gln Val Leu Thr Ser Gln Arg Pro Gly Pro Ala Gly Pro His 50 55 60

Gly Ser Thr Thr Pro Ser Arg Cys Pro Arg Pro Phe Val Ser His Pro 65 70 75 80

Ala Phe Ser Arg lle Ser Lys Asp Ala Arg Leu Asp Pro Gln Ser Trp 85 90 95

Lys Thr Ala Val Pro Gly Ser His Gln Asn Gly Glu Ala Ser Ser Ser 100 105 110

His

<210> 3308

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3308 Met Lys Leu Arg Cys Tyr Leu Lys Leu Thr Ala Pro Asn Arg Pro Asp 5 10 Ser Gln Cys Pro Pro Arg Thr Ser Val Pro Ala Asp Leu Ala Ser Gly 20 25 Val Thr Ser Gly Glu Pro Phe Lys Ser Pro His Leu Ala Ser His Ser 40 Trp Pro Thr Leu Cys Ser Arg Ala Asn Gln Val Ala Asn Asp Lys Arg 50 55 Leu Ser Trp Pro Asn Ser Ser Leu Ala Trp Ile Thr Pro Ile Arg Cys 70 75 Gln Arg Cys Leu Leu Arg Trp Lys Asn Gln Ser Gly Ser Gly Val Arg 85 90 His Gln Gly Lys Gln Ala Asp Leu Glu Glu Ile Lys Tyr Ala Cys Ser 100 105 110 Leu Pro Ile Gln Val 115 <210> 3309 <211> 131 <212> PRT <213> Homo sapiens <400> 3309 Met Val Pro Arg Pro Leu Gln Thr Arg Val Pro Gly Cys Phe Ser Lys 10 Gly Cys Glu Gly Thr Gly Gln Arg Gly Trp Val Trp Gly Arg Glu His 20 30 25 lle Asp Val Gly Ala His Ser Val Gly Thr Gly Arg Gln Leu Leu Cys

Gln Ala Phe lle Phe Pro lle Leu Tyr Met Arg Lys Leu Gly Ser Gly

Gly Glu Gly Cys Leu Ala Asp Val Trp Pro Gly Gly Gly Gly Pro Gly

Leu Glu Pro Gln Ala Pro Pro Ser Ser Cys Lys Ser Pro Ala Gln Arg

60

80

75

55

70

Arg Gly Gly Ser Trp Gly Leu Ser Ser Leu Gln Asp Arg Val His Leu Ser Ser Ser Ile IIe His Ser Phe IIe His Ser Phe Asn Lys Cys Leu Ala Ser Gly <210> 3310 <211> 157 <212> PRT <213> Homo sapiens <400> 3310 Met Leu Ala Glu Trp Gly Ala Cys Leu Leu Leu Ala Val Ala Leu Leu Gly Pro Gly Leu Gln Ala Gln Ala Met Glu Gly Val Lys Cys Gly Gly Val Leu Ser Ala Pro Ser Gly Asn Phe Ser Ser Pro Asn Phe Pro Arg Leu Tyr Pro Tyr Asn Thr Glu Cys Ser Trp Leu Ile Val Val Ala Glu Gly Ser Ser Val Leu Leu Thr Phe His Ala Phe Asp Leu Glu Tyr His Asp Thr Cys Ser Phe Asp Phe Leu Glu Ile Tyr Asn Gly Ala Ser Pro Asp Lys Gly Asn Leu Leu Gly Arg Phe Cys Gly Lys Val Pro Pro Pro Pro Phe Thr Ser Ser Trp His Val Met Ser Val Ile Phe His Ser Asp Lys His Val Ala Ser His Gly Phe Ser Ala Gly Tyr Gln Lys Gly Gln Arg Gly Ala Leu Gly Thr Cys Cys Ser Gly Ser His Leu

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<211> 630
<212> PRT
<213> Homo sapiens
<400> 3311
Met Lys 11e Gly Gln Gly Lys Tyr Glu Pro Gly Phe Phe Pro Lys Leu
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Gln Ser Asp Val Leu Ser Thr Gly Pro Ala Ser Asn Lys Trp Thr Lys
                                 25
Arg Asn Ala Pro Ala Gln Trp Arg Arg Lys Asp Arg Gln Lys Gln His
         35
                             40
                                                  45
Thr Glu His Leu Arg Leu Asp Asn Asp Gln Arg Glu Lys Tyr lle Gln
                         55
                                              60
Glu Ala Arg Thr Met Gly Ser Thr Ile Arg Gln Pro Lys Leu Ser Asn
                                          75
                     70
                                                              80
Leu Ser Pro Ser Val lle Ala Gln Thr Asn Trp Lys Phe Val Glu Gly
                 85
                                      90
Leu Leu Lys Glu Cys Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys
                                105
Met Gly Arg Glu Ala Val Glu Leu Gly His Gly Glu Val Asn Ile Thr
                                                 125
        115
                             120
Gly Val Glu Glu Asn Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu
                        135
Arg lle Trp Ser His Gly Leu Gln Val Lys Gln Gly Lys Ser Ala Leu
                    150
                                         155
Trp Ser His Leu Leu His Tyr Gln Asp Asn Arg Gln Arg Lys Leu Thr
                165
                                     170
Ser Gly Ser Leu Ser Thr Ser Gly 11e Leu Leu Asp Ser Glu Arg Arg
            180
                                185
Lys Ser Asp Ala Ser Ser Leu Met Pro Pro Leu Arg 11e Ser Leu 11e
        195
                             200
                                                 205
Gln Asp Met Arg His Ile Gln Asn Ile Gly Glu Ile Lys Thr Asp Val
```

⟨210⟩ 3311

Gly	Lys	Ala	Arg	Ala	Trp	Val	Arg	Leu	Ser	Met	Glu	Lys	Lys	Leu	Leu
225					230					235					240
Ser	Arg	llis	Leu	Lys	Gln	Leu	Leu	Ser	Asp	His	Glu	Leu	Thr	Lys	Lys
				245					250					255	
Leu	Tyr	Lys	Λrg	Tyr	Ala	Phe	Leu	Arg	Cys	Asp	Asp	Glu	Lys	G]u	Gln
			260					265					270		
Phe	Leu	Tyr	His	Leu	Leu	Ser	Phe	Asn	Ala	Val	Asp	Tyr	Phe	Cys	Phe
		275					280					285			
Thr	Asn	Val	Phe	Thr	Thr	Ile	Leu	Ile	Pro	Tyr	His	Ile	Leu	He	Val
	290					295					300				
Pro	Ser	Lys	Lys	Leu	Gly	Gly	Ser	Met	Phe	Thr	Ala	Asn	Pro	Trp	lle
305					310					315					320
Cys	He	Ser	Gly	Glu	Leu	Gly	Glu	Thr	Gln	Пe	Met	Gln	lle	Pro	Arg
				325					330					335	
Asn	Val	Leu		Met	Thr	Phe	Glu	Cys	Gln	Asn	Leu	G1 y	Lys	Leu	Thr
			340					345					350		
Thr	Val		lle	Gly	His	Asp	Asn	Ser	G1y	Leu	Tyr		Lys	Trp	Leu
		355					360					365			
Val		Tyr	Val	Met	Val		Asn	Glu	He	Thr		His	Thr	Tyr	Lys
	370					375					380				
	Pro	Cys	Gly	Arg		Leu	Gly	Lys	G] y		Asp	Asp	Gly	Ser	
385					390					395					400
Glu	Arg	He	Leu		Gly	Glu	Leu	Leu		Ser	Gln	Pro	Glu		Asp
			_	405			_		410			_	_	415	
Glu	Arg	Pro		Arg	Thr	Pro	Pro		GIn	GIn	Ser	Pro		Val	Пе
			420	mı		0		425			D		430		7 0.1
Arg	Arg		Val	Thr	He	Ser	Pro	Asn	Asn	Lys	Pro		Leu	Asn	Thr
c.1	C.1	435	6.1	C 1		7.1	440	6.1		17 1		445			
61 i.		He	GIn	61u	Ser		Gly	GJu	Ala	Val		61 y	He	Val	Lys
	450			13	61	455	6.1		6.1	C	460	T.I			
	Phe	HIS	Lys	Pro		Lys	Glu	Arg	Q1 y		Leu	lhr	Leu	Leu	
465	C.I.	C I	C	C.1	470	12. 1	C	• 1		475	C1	4.3	121	C 1	480
Cys	01 y	61u	cys		Leu	val	Ser	Ala		Glu	61n	Ala	rhe		fII S
C 1	Di		C	485	Δ.		יכו		490	V 3	ימ	11	т	495	121
uТу	rne	LŸS		Pro	Arg	Leu	Phe		Asn	val	rhe	11e		Asp	rne
			500					505					510		

Ŀ

Leu Glu Lys Ala Gln Thr Tyr Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His Thr Arg Ala Arg Asn Phe Cys Arg Phe Val Thr Ala lle Asn Asn Thr Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu Phe Asn lle Thr Leu Glu Thr Ser Leu Val Lys Gly Ile Asp Ile

<210> 3312

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3312

Met Ser Arg Leu Ala Gly Gly Gln Ala Pro Tyr Leu Trp Glu Gln Gly Phe Ala Gln Pro Pro Trp Asp Ala Leu Gly Leu Leu Thr Ala Gln Asp Pro Ser Arg Glu Ala Ala Trp Ile Gly Gly Ser Gly Leu Thr Ala Gly Leu Gly Leu Glu Pro Ser Pro Cys Pro Ala Gln Ala Pro Ala Glu Pro Gly Ala Leu Ala Glu Ala Gly Leu Gly Ser Gly Ala Ala Arg Arg Pro Pro lle Ser His Ser Leu Gly Val Leu Arg Val Thr Gln Arg Thr Val

Lys Cys Trp Ile

<210> 3313

<211> 635

<212> PRT

<213> Homo sapiens

<400> 3313

Met Ser Thr Cys Cys Trp Cys Thr Pro Gly Gly Ala Ser Thr Ile Asp 1 5 10 15

Phe Leu Lys Arg Tyr Ala Ser Asn Thr Pro Ser Gly Glu Phe Gln Thr
20 25 30

Ala Asp Glu Asp Leu Cys Tyr Cys Leu Glu Cys Val Ala Glu Tyr His
35 40 45

Lys Ala Arg Asp Glu Leu Pro Phe Leu His Glu Val Leu Trp Glu Leu 50 55 60

Glu Thr Leu Arg Leu lle Asn His Phe Glu Lys Ser Met Lys Ala Glu
65 70 75 80

lle Gly Asp Asp Glu Leu Tyr lle Val Asp Asn Asn Gly Glu Met
85 90 95

Pro Leu Phe Asp Ile Thr Gly Gln Asp Phe Glu Asn Lys Leu Arg Val 100 105 110

Pro Leu Leu Glu Tle Leu Lys Tyr Pro Tyr Leu Leu Leu His Glu Arg 115 120 125

Val Asn Glu Leu Cys Val Glu Ala Leu Cys Arg Met Glu Gln Ala Asn 130 135 140

Cys Ser Phe Gln Val Phe Asp Lys His Pro Gly Ile Tyr Leu Phe Leu 145 150 155 160

Val His Pro Asn Glu Met Val Arg Arg Trp Ala lle Leu Thr Ala Arg 165 170 175

Asn Leu Gly Lys Val Asp Arg Asp Asp Tyr Tyr Asp Leu Gln Glu Val 180 185 190

Leu Leu Cys Leu Phe Lys Val 11e Glu Leu Gly Leu Leu Glu Ser Pro 195 200 205

Asp	He	Tyr	Thr	Ser	Ser		Leu	Glu	Lys	G1 y	Lys	Leu	He	Leu	Leu
	210					215					220				
Pro	Ser	His	Met	Tyr	Asp	Thr	Thr	Asn	Tyr	Lys	Ser	Tyr	Trp	Leu	Gly
225					230					235					240
He	Cys	Met	Leu	Leu	Thr	He	Leu	Glu	Glu	Gln	Ala	Met	Asp	Ser	Leu
				245					250					255	
Leu	Leu	Gly	Ser	Asp	Lys	Gln	Asn	Asp	Phe	Met	Gln	Ser	He	Leu	llis
			260					265					270		
Thr	Met	Glu	Arg	Glu	Ala	Asp	Asp	Asp	Ser	Val	Asp	Pro	Phe	Trp	Pro
		275					280					285			
Ala	Leu	His	Cys	Phe	Met	Val	Пe	Leu	Asp	Arg	Leu	Gly	Ser	Lys	Val
	290					295					300				
Trp	Gly	Gln	Leu	Met	Asp	Pro	Пe	Va]	Ala	Phe	Gln	Thr	He	He	Asn
305					310					315					320
Asn	Ala	Ser	Tyr	Asn	Arg	Gly	He	Arg	His	Пе	Arg	Asn	Ser	Ser	Val
				325					330					335	
Arg	Thr	Lys	Leu	Glu	Pro	Glu	Ser	Tyr	Leu	Лsp	Asp	Met	Val	Thr	Cys
			340					345					350		
Ser	Gln	He	Val	Tyr	Asn	Tyr	Asn	Pro	Glu	Lys	Thr	Lys	Lys	Asp	Ser
		355					360					365			
Gly	Trp	Arg	Thr	Ala	lle		Pro	Asp	Tyr	Cys		Asn	Met	Tyr	Glu
	370					375					380				
	Met	Glu	Thr	Leu		Ser	Val	Leu	Gln		Asp	He	Gly	G1n	
385					390					395					400
Met	Arg	Va]	His	Asn	Ser	Thr	Phe	Leu		Phe	He	Pro	Phe		Gln
				405					410		_			415	
Ser	Leu	Met		Leu	Lys	Asp	Leu		Val	Ala	Tyr	He		Gln	Val
			420					425					430		
Val	Asn		Leu	Tyr	Ser	Glu		Lys	Glu	Val	Leu		GIn	Thr	Asp
		435					440					445			_
Ala		Cys	Asp	Lys	Val		Glu	Phe	Phe	Leu		He	Leu	Val	Ser
., -	450	0.1				455				,	460				
	He	Glu	Leu	His		Asn	Lys	Lys	Cys		His	Leu	Leu	Trp	
465	6	0.3	0.1	Tr.	470				,, ,	475		. ~			480
Ser	Ser	GIn	GIn	Trp	Val	Glu	Ala	Val		Lys	Cys	Ala	Lys		Pro
				485					490					495	

Thr Thr Ala Phe Thr Arg Ser Ser Glu Lys Ser Ser Gly Asn Cys Ser 505 Lys Gly Thr Ala Met Ile Ser Ser Leu Ser Leu His Ser Met Pro Ser 515 520 525 Asn Ser Val Gln Leu Ala Tyr Val Gln Leu 11e Arg Ser Leu Leu Lys 535 540 Glu Gly Tyr Gln Leu Gly Gln Gln Ser Leu Cys Lys Arg Phe Trp Asp 550 555 560 Lys Leu Asn Leu Phe Leu Arg Gly Asn Leu Ser Leu Gly Trp Gln Leu 565 570 575 Thr Ser Gln Glu Thr His Glu Leu Gln Ser Cys Leu Lys Gln lle lle 585 580 Arg Asn IIe Lys Phe Lys Ala Pro Pro Cys Asn Thr Phe Val Asp Leu 595 600 605 Thr Ser Ala Cys Lys Ile Ser Pro Ala Ser Tyr Asn Lys Glu Glu Ser 615 620 Ser Leu Ser Ser Phe Asn Ile Ser Tyr Phe Lys 630 635

<210> 3314

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3314

Met Gln Gly Lys Cys Phe Ser Arg Thr Ser Leu Leu Ser Lys Gly Thr
1 5 10 15

Gln Gln Ser Gly Cys Thr Leu Cys Asp Leu Pro Ser Gln His Val Pro 20 25 30

Pro Leu Ser Pro Arg Arg Glu Arg Glu Arg Val Phe Thr Val Ser
35 40 45

Val Ser Leu Ser His Gln Ala Gly Val Gln Trp Pro Asp Leu Gly Ser 50 55 60

Leu His Pro Leu Thr Pro Trp Phe Lys Gln Phe Ser Cys Leu Ser Leu 65 70 75 80

Pro Arg Ser Trp Asp Ser Arg His Ala Pro Pro Leu Pro Ala Asn Phe
85 90 95

Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser
100 105 110

Leu Ser

<210> 3315

<211> 221

<212> PRT

145

<213> Homo sapiens

<400> 3315 Met Val Leu Asp Lys Arg Ala Gly Lys Lys Arg Ala Ala Arg Gly Gly 10 Phe Cys Pro Arg Arg Pro Gln Ala Gly Gly Pro His Gly Leu Cys Pro 25 Asp Val Leu Leu His Pro Ala Ala Pro Thr Thr Glu Thr Ala Pro 35 40 45 Gly Glu Gly Thr Thr Leu Ser Thr Gly Gln Pro Val Ser Pro Gly Arg 55 Leu Leu Ala His His Ser Trp Gly Pro Glu Glu Ala Pro Ala Gly Gly 65 70 75 80 Gly Ser Gly Pro Gly Leu Ser Leu Ser Leu His Thr Asp Trp Ser Pro 85 90 Ala Leu Ser Pro Thr Gly Thr Leu Arg Gly Asn Phe Ser Lys Val Leu 105 110 Trp Gly Gln Arg Glu Val Val Glu Pro Ala Arg Leu Trp Glu Ala Pro 115 120 125 Glu Lys Leu Pro Leu Pro Thr Ser Val Leu Ala Gly Phe Gly Pro Trp

Ala Gly Pro Pro Gln Ala Pro Lys Gly Lys Val Val Gln Gly Lys Ala

Leu Glu Ala Ala Gly 11e Arg Val Gly His Thr Glu Gly Tyr Gln Val

140

160

175

155

170

135

150

⟨210⟩ 3316

<211> 256

<212> PRT

<213> Homo sapiens

<400> 3316 Met Gly Cys Ala Arg Arg His Ala Gly Pro Arg Gly Ser Pro Val Lys Gly Ser Gly Gly Leu Asp Ser Leu Trp Ala Trp Gly Gly Val Val Ser Leu Cys Trp Leu Ser Tyr Arg Trp Trp Pro Val Ser Pro Gly Ser Gly Cys Ser His Val Pro Ala Pro Thr Leu Pro Ala Arg Asp Arg Pro His Gln Asp Pro Gly Ala Ala Pro Ala Ser Ala Arg Leu Ser Pro Arg Ser Gln Val Arg Pro Gln Pro Leu Arg His Ala Ser Gly Ser Ser Cys Cys Thr Cys Ser Ser Pro Cys Ala Ser Thr Leu Leu Ser Gly Phe Leu Pro Leu Ala Thr Gly Arg Val Cys Val Lys Pro Gln Gly Leu Gln Lys Leu Glu Val Pro Leu Ser Gly Arg Ile Met His Cys Thr Arg Gly Ile Lys Gly Gly Asp Arg Lys Asn Tyr Gly Cys Cys Asp Thr Ser Pro Thr Ala

Pro Arg Leu Ala Ala Thr Ala Thr Arg Arg Asp Phe Ser Val Ala Ser

Arg Gly Val Gly Gln Arg Trp Ser Leu Val Thr Phe Ser Leu Gly Pro Ala Pro Gly Leu Ser Ser Leu Gly Asn Ser Thr Ser Leu Ser Thr Pro Leu Glu Gly Leu Thr Met Arg Gly Ala Gln Thr Gly Gly 11e Thr Thr Trp Phe Gly Leu Tyr His Ser Pro Arg Asp Lys Ala Arg Gln Thr Pro Leu His Ile Arg Ser Glu Phe Glu Leu Trp Leu His Asp Thr Asp Thr

<210> 3317

<211> 639

<212> PRT

<213> Homo sapiens

<400> 3317 Met Gly Pro Gln Gly Ala Arg Arg Gln Ala Phe Leu Ala Phe Gly Asp Val Thr Val Asp Phe Thr Gln Lys Glu Trp Arg Leu Leu Ser Pro Ala Gln Arg Ala Leu Tyr Arg Glu Val Thr Leu Glu Asn Tyr Ser His Leu Val Ser Leu Gly Ile Leu His Ser Lys Pro Glu Leu Ile Arg Arg Leu Glu Gln Gly Glu Val Pro Trp Gly Glu Glu Arg Arg Arg Pro Gly Pro Cys Ala Gly Ile Tyr Ala Glu His Val Leu Arg Pro Lys Asn Leu Gly Leu Ala His Gln Arg Gln Gln Gln Leu Gln Phe Ser Asp Gln Ser Phe Gln Ser Asp Thr Ala Glu Gly Gln Glu Lys Glu Lys Ser Thr Lys

Pro Met Ala Phe Ser Ser Pro Pro Leu Arg His Ala Val Ser Ser Arg

Arg	Arg	Asn	Ser	Val	Val	Glu	lle	Glu	Ser	Ser	Gln	Gly	Gln	Arg	Glu
145					150					155					160
Asn	Pro	Thr	Glu	lle	Asp	Lys	Val	Leu	Lys	Gly	He	Glu	Asn	Ser	Arg
				165					170					175	
Trp	Gly	Ala	Phe	Lys	Cys	Ala	Glu	Arg	Gly	Gln	Asp	Phe	Ser	Arg	Lys
			180					185					190		
Met	Met	Val	He	lle	His	Lys	Lys	Ala	His	Ser	Arg	Gln	Lys	Leu	Phe
		195					200					205			
Thr	Cys	Arg	Glu	Cys	His	Gln	Gly	Phe	Arg	Asp	Glu	Ser	Ala	Leu	Leu
	210					215					220				
Leu	His	G1n	Asn	Thr		Thr	Gly	Glu	Lys	Ser	Tyr	Val	Cys	Ser	Val
225					230					235					240
Cys	Gly	Arg	G1 y		Ser	Leu	Lys	Ala		Leu	Leu	Arg	His	Gln	Arg
				245					250					255	
Thr	His	Ser		Glu	Lys	Pro	Phe		Cys	Lys	Val	Cys	Gly	Arg	Gly
		_	260					265					270		
Tyr	Thr		Lys	Ser	Tyr	Leu	Thr	Val	His	Glu	Arg		His	Thr	Gly
		275	_				280					285			
Glu		Pro	Tyr	Glu	Cys		Glu	Cys	G] y	Arg		Phe	Asn	Asp	Lys
	290	m				295					300				
	Ser	Tyr	Asn	Lys		Leu	Lys	Ala	His		Gly	Glu	Lys	Pro	
305					310	_		_		315		_	_		320
val	Cys	Lys	Glu		Gly	Arg	Gly	lyr		Asn	Lys	Ser	Tyr		Val
v ı				325	,,,	C	C 1	61	330	Б	Tr.		0	335	<i>a</i> 1
vai	HIS	Lys		11e	fl1S	Ser	Gly		Lys	Pro	lyr	Arg		GIn	Glu
C	C1	A	340	101	C	A		345	11.	,	11	TI	350	C I	
Cys	61 y		GIY	Pne	ser	Asn	Lys	Ser	1115	Leu	11e		HIS	GIN	Arg
Th.,	u	355	C1	C1	1	Dua	360	41-	C	A == ==	C1	365	1	C1	C
IMI	370	Ser	GIY	GIU	Lys		Phe	АТА	Cys	Arg		Cys	Lys	61n	Ser
Dho		Vol	Lva	C1 _w	Con	375	1	A 20.07	u; a	Cl _n	380	Th.,	ui a	Con	C1
385	261	val	Lys	бту	390	reu	Leu	Arg	HIS	395	Arg	Inr	HIS	26L	
	Lvc	Dro	Dho	Vol		Luc	Aan	Cua	C1		San	Dha	Can.	Cl.	400
014	rys	1.10	спе	405	CyS	LYS	Asp	cys	410	vi. 8	Sel	гие	ser	415	Lys
Sor	Thr	Lou	Val		Hic	Gla	Arg	Thr		Sor	Gly	C1	Lvc		Dha
Jei	1 111	Leu	420	1 1 1	1112	0111	vi g	425	1112	261	оту	01 u		110	тпе
			120					420					430		

Val Cys Arg Glu Cys Gly Gln Gly Phe 11e Gln Lys Ser Thr Leu Val Lys His Gln 11e Thr His Ser Glu Glu Lys Pro Phe Val Cys Lys Asp Cys Gly Arg Gly Phe Ile Gln Lys Ser Thr Phe Thr Leu His Gln Arg Thr His Ser Glu Glu Lys Pro Tyr Gly Cys Arg Glu Cys Gly Arg Arg Phe Arg Asp Lys Ser Ser Tyr Asn Lys His Leu Arg Ala His Leu Gly Glu Lys Arg Phe Phe Cys Arg Asp Cys Gly Arg Gly Phe Thr Leu Lys Pro Asn Leu Thr lle His Gln Arg Thr His Ser Gly Glu Lys Pro Phe Val Cys Asn Val Cys Gly Gln Gly Phe Ser Trp Lys Arg Ser Leu Thr Arg His His Trp Arg lle His Ser Lys Glu Lys Pro Phe Val Cys Gln Glu Cys Lys Arg Gly Tyr Thr Ser Lys Ser Asp Leu Thr Val His Glu Arg Ile His Thr Gly Glu Arg Pro Tyr Glu Cys Gln Glu Cys Gly Arg Lys Phe Ser Asn Lys Ser Tyr Tyr Ser Lys His Leu Lys Arg His Leu Arg Glu Lys Arg Phe Cys Thr Gly Ser Val Gly Glu Ala Ser Ser

<210> 3318

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3318

Met Thr Ser Trp Ile Pro Leu Met Pro Gly Asp Ser Ala Asp Leu Phe
1 5 10 15

Gly	Asp	Gly	Thr	Thr	Glu	Asp	Gly	Ser	Ala	Ala	Asn	Gly	Arg	Leu	Trp
			20					25					30		
Arg	Thr	Val	11e	Πe	Gly	Glu	Gln	Glu	His	Arg	lle	Asp	Leu	His	Met
		35					40					45			
He	Arg	Pro	Tyr	Met	Lys	Val	Va]	Thr	His	Gly	Gly	Tyr	Tyr	Gly	Glu
	50					55					60				
G1 y	Leu	Asn	Ala	He	lle	Val	Phe	Ala	Ala	Cys	Phe	Leu	Pro	Asp	Ser
65					70					75					80
Ser	Leu	Pro	Asp	Tyr	His	Tyr	lle	Met	Glu	Asn	Leu	Phe	Leu	Tyr	Val
				85					90					95	
lle	Ser	Ser	Leu	Glu	Leu	Leu	Val	Ala	Glu	Asp	Tyr	Met	Πle	Val	Tyr
			100					105					110		
Leu	Asn	Gly	Λla	Thr	Pro	Arg	Arg	Arg	Met	Pro	Gly	He	Gly	Trp	Leu
		115					120					125			
Lys	Lys	Cys	Tyr	Gln	Met	He	Gly	Arg	Arg	Leu	Arg	Lys	۸sn	Leu	Lys
	130					135					140				
Ser	Leu	lle	lle	Val	His	Pro	Ser	Trp	Phe	He	Arg	Thr	Val	Leu	Ala
145					150					155					160
11e	Ser	Arg	Pro	Phe	lle	Ser	Val	Lys	Phe	He	Asn	Lys	lle	Gln	Tyr
				165					170					175	
Val	His	Ser	Leu	Glu	Asp	Leu	Glu	Gln	Leu	Tle	Pro	Met	Glu	His	Val
			180					185					190		
Gln	He	Pro	Asp	Cys	Val	Leu	Gln	Tyr	Glu	Glu	Glu	Arg	Leu	Lys	Ala
		195					200					205			
Arg		Glu	Ser	Ala	Arg	Pro	Gln	Pro	Glu	Phe	Val	Leu	Pro	Arg	Ser
	210					215					220				
Glu	Glu	Lys	Pro	Glu	Val	Ala	Pro	Val	Glu	Asn	Arg	Ser	Ala	Leu	Val
225					230					235					240
Ser	Glu	Asp	Gln		Thr	Ser	Met	Ser							
				245											

<210> 3319

<211> 959

<212> PRT

<213> Homo sapiens

<400)> 3;	319													
Met	Ala	Pro	Tyr	Gln	Gly	Pro	Ala	Leu	Tyr	Val	Tyr	Asn	Asn	Ala	Val
1				5					10					15	
Phe	Thr	Pro	Glu	Asp	Trp	His	Gly	He	GIn	Glu	He	Ala	Arg	Ser	Arg
			20					25					30		
Lys	Lys	Asp	Asp	Pro	Leu	Lys	Val	Gly	Arg	Phe	Gly	He	Gly	Phe	Asn
		35					40					45			
Ser	Va]	Tyr	His	He	Thr	Asp	Val	Pro	Cys	lle	Phe	Ser	G1 y	Asp	Gln
	50					55					60				
He	Gly	Met	Leu	Asp	Pro	His	Gln	Thr	Leu	Phe	Gly	Pro	His	Glu	Ser
65					70					75					80
Gly	Gln	Cys	Trp	Asn	Leu	Lys	Asp	Asp	Ser	Lys	Glu	lle	Ser	Glu	Leu
				85					90					95	
Ser	Asp	Gln	Phe	Ala	Pro	Phe	Val	Gly	lle	Phe	Gly	Ser	Thr	Lys	Glu
			100					105					110		
Thr	Phe	Ile	Asn	Gly	Asn	Phe	Pro	Gly	Thr	Phe	Phe	Arg	Phe	Pro	Leu
		115					120					125			
Arg		Gln	Pro	Ser	Gln	Leu	Ser	Ser	Asn	Leu	Tyr	Asn	Lys	Gln	Lys
	130					135					140				
Val	Leu	Glu	Leu	Phe		Ser	Phe	Arg	Ala		Ala	Asp	Thr	Val	
145					150					155					160
Leu	Phe	Leu	Lys		Val	G1n	Asp	Val		Leu	Tyr	Val	Arg		Ala
				165					170			~		175	
Asp	Gly	Thr		Lys	Leu	Val	Phe		Val	Thr	Ser	Ser		Ser	Lys
			180	61		Б		185				,	190	Tr.	. 1
Ala	Leu		HIS	Glu	Arg	Pro	Asn	Ser	He	Lys	He		Gly	lhr	Ala
	0	195	æ	0		,	200	Б	C			205	TI.	C	17. 7
11e		Asn	Tyr	Cys	Lys		Thr	Pro	Ser	Asn		116	inr	Cys	vai
ті.	210	112 -	V - 1	Λ	7.1	215		C1	C1	C1	220	ть	1	۸	۸٦.
	lyr	HIS	val	Asn		val	Leu	61u	GIU		26r	Inr	Lys	Asp	
225	1	TL	Con	Т	230	V = 1	C++=	A	Com	235	C1	C1	A 121 cm	C1	240
0111	Lys	1111	Ser	1rp 245	Leu	val	Cys	ASII	5er 250	V 61.1	OTY	OIÀ	wi g	255	116
Sar	S 0.3-	Luc	Lou		C ~ ~	Lou	A 1 ~	A a ==		Lov	Luc	Dha	Vol		11~
261.	ser	гуя	260	nsp	ser	ren	Ala	265	Olu	Leu	Lys	тпе	270	110	116
			200					200					210		

lle	G1 y	He	Ala	Met	Pro	Leu	Ser	Ser	Arg	Asp	Asp	Glu	Ala	Lys	Gly
		275					280					285			
Ala		Ser	Лsp	Phe	Ser		Lys	Ala	Phe	Cys		Leu	Pro	Leu	Pro
	290					295					300				
	Gly	Glu	Glu	Ser		Thr	Gly	Leu	Pro		His	He	Ser	Gly	
305	٥.		mı		310				7.	315			0.1		320
Phe	Gly	Leu	Thr		Asn	Arg	Arg	Ser		Lys	Trp	Arg	Glu		Asp
C1	Т	A	A a.m.	325	41.	41.	1	Tana	330	C1	Dha	lau	Vol	335 Mat	A a.s.
GIN	rrp	Arg	340	Pro	АТА	мта	Leu	345	ASII	Giu	rne	Leu	Val 350	met	ASII
Val	Val	Pro		Ala	Tyr	Ala	Thr		He	Len	Asn	Ser	He	lvs	Aro
, 41	,	355	Ly.5	7110	. , .	1110	360	LCG	110	Lea	71.545	365	110	15,5	S
Leu	Glu		Glu	Lvs	Ser	Ser		Phe	Pro	Leu	Ser		Asp	Val	He
	370					375					380				
Tyr	Lys	Leu	Trp	Pro	Glu	Ala	Ser	Lys	Val	Lys	Val	His	Trp	Gln	Pro
385					390					395					400
Val	Leu	Glu	Pro	Leu	Phe	Ser	Glu	Leu	Leu	Gln	Asn	Ala	Val	Ile	Tyr
				405					410					415	
Ser	11e	Ser	Cys	Asp	Trp	Val	Arg	Leu	Glu	Gln	Val	Tyr	Phe	Ser	G1 u
			420					425					430		
Leu	Asp		Asn	Leu	Glu	Tyr		Lys	Thr	Val	Leu		Tyr	Leu	Gln
		435					440					445			
Ser		Gly	Lys	Gln	He		Lys	Va]	Pro	G1 y		Val	Asp	Ala	Ala
V - 1	450	1	ть	A 1 -	A 1 -	455	C1	ть	The	Dava	460	A	1	V = 1	Tl
va1 465	GIN	Leu	Inr	АТа	A1a	ser	Gry	ınr	шг	475	vai	Arg	Lys	vai	1nr 480
	Ala	Trn	Val	Arg		Val	Leu	Arg	Lve		Ala	His	Leu	Glv	
,,,	7170	II p		485	0111	, (,1	130 0	713 8	490	0,0	,,,,	MIS	Dea	495	0,0
Ala	Glu	Glu	Lys		His	Leu	Leu	Glu		Val	Leu	Ser	Asp		Ala
			500					505					510		
Tyr	Ser	Glu	Leu	Leu	Gly	Leu	Glu	Leu	Leu	Pro	Leu	Gln	Asn	Gly	Asn
		515					520					525			
Phe	Val	Pro	Phe	Ser	Ser	Ser	Val	Ser	Asp	Gln	Asp	Val	11e	Tyr	He
	530					535					540				
Thr	Ser	Ala	Glu	Tyr	Pro	Arg	Ser	Leu	Phe	Pro	Ser	Leu	Glu	Gly	Arg
545					550					555					560

Phe	He	Leu	Asp	Asn	Leu	Lys	Pro	His	Leu	Val	Ala	Ala	Leu	Lys	Glu
				565					570					575	
Ala	Ala	Gln	Thr	Arg	Gly	Arg	Pro	Cys	Thr	Gln	Leu	Gln	Leu	Leu	Asn
			580					585					590		
Pro	Glu		Phe	Ala	Arg	Leu		Lys	Glu	Val	Met		Thr	Phe	Trp
		595					600					605			
Pro		Arg	Glu	Leu	He		Gln	Trp	Tyr	Pro	Phe	Asp	Glu	Asn	Arg
	610					615					620				
	His	Pro	Ser	Val		Trp	Leu	Lys	Met		Trp	Lys	Asn	Leu	
625					630					635					640
He	His	Phe	Ser		Asp	Leu	Thr	Leu		Asp	Glu	Met	Pro	Leu	He
_				645					650					655	
Pro	Arg	Thr		Leu	Glu	Glu	Gly		Thr	Cys	Val	GIu		He	Arg
			660	6			2.3	665			63	6	670		61
Leu	Arg		Pro	Ser	Leu	Val		Leu	Asp	Asp	Glu		Glu	Ala	GIn
Lou	Dag	675	Dha	1	41.	A an	680	V - 1	Cln	1	Lou	685	C1	Dha	Vo 1
Leu	690	ĢIU	rne	Leu	АТа	695	11e	val	6111	Lys	700	GIY	бту	Phe	val
Lou		Lvo	Lou	Aan	A10		110	Cln	u; c	Dno		110	Lvo	Lys	Tur
705	Lys	Lys	Leu	nsp	710	261	116	OTH	1112	715	Leu	116	Lys	rys	720
	His	Ser	Pro	l eu		Ser	Ala	Val	Leu		He	Met	Glu	Lys	
110	1113	501	110	725	110	561	mu	, (1)	730	OIII	110	.ne c	ora	735	me c
Pro	Leu	Gln	Lvs		Cvs	Asn	Gln	He		Ser	Leu	Leu	Pro	Thr	His
			740		-, -			745					750		
Lvs	Asp	Ala		Arg	Lys	Phe	Leu		Ser	Leu	Thr	Asp		Ser	Glu
		755					760					765			
Lys	Glu	Lys	Arg	lle	lle	Gln	Glu	Leu	Ala	lle	Phe	Lys	Arg	lle	Asn
	770					775					780				
His	Ser	Ser	Asp	Gln	Gly	He	Ser	Ser	Tyr	Thr	Lys	Leu	Lys	Gly	Cys
785					790					795					800
Lys	Val	Leu	His	His	Thr	Ala	Lys	Leu	Pro	Ala	Asp	Leu	Arg	Leu	Ser
				805					810					815	
He	Ser	Val	lle	Asp	Ser	Ser	Asp	G1u	Λla	Thr	lle	Arg	Leu	Ala	Asn
			820					825					830		
Met	Leu	Lys	lle	Glu	Gln	Leu	Lys	Thr	Thr	Ser	Cys	Leu	Lys	Leu	Val
		835					840					845			

Leu Lys Asp 11e Glu Asn Ala Phe Tyr Ser His Glu Glu Val Thr Gln Leu Met Leu Trp Val Leu Glu Asn Leu Ser Ser Leu Lys Asn Glu Asn Pro Asn Val Leu Glu Trp Leu Thr Pro Leu Lys Phe Ile Gln Ile Ser Gln Glu Gln Met Val Ser Ala Gly Glu Leu Phe Asp Pro Asp 11e Glu Val Leu Lys Asp Leu Phe Cys Asn Glu Glu Gly Thr Tyr Phe Pro Pro Ser Val Phe Thr Ser Pro Asp Ile Leu His Ser Leu Arg Gln Ile Gly Leu Lys Asn Glu Ala Ser Leu Lys Glu Lys Asp Val Val Gln Val

<210> 3320

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3320

Met Gly Ser Ala Leu Gly Thr Ala Gly Ser Trp Ala Gln Lys Gly Gly Thr Lys Val Cys Val Gln His Gln Glu Gln Gln Ala Ala Gly His Lys Arg Glu Val Leu Gly Met Trp Val Gln His Gln Gly Gln Arg Ser Thr Lys Gly Lys Arg Cys Gly Tyr Glu Phe Ser Thr Lys Asp Ser Gly Gln Leu lle Leu Ala Gly Val Leu Gly Met His Phe Arg His Glu Tyr Gln Leu Pro Arg Pro Gly Thr Val Val His Ala Leu Ile Pro Ala Leu Trp

Glu Ala Lys Ala Asp Gly Ser Arg Gly Gln Gln Phe Glu Thr Ser Leu

Ala Asn lle Val Lys Leu Cys Leu Tyr 115 120

⟨210⟩ 3321

<211> 1268

<212> PRT

<213> Homo sapiens

⟨400⟩ 3321

Met Arg Glu Leu Glu Met Ser Arg Thr Asn Thr Glu Asn Ile Glu Thr
1 5 10 15

Ser Thr Glu Thr Ala Glu Ser Ser Ser Glu Ser Leu Ser Ser Leu Glu 20 25 30

Gln Leu Asp Leu Leu Phe Glu Lys Glu Gln Gly Ala Val Arg Lys Ala 35 40 45

Gly Trp Leu Phe Phe Lys Pro Leu Val Thr Val Gln Lys Glu Arg Lys
50 55 60

Leu Glu Leu Val Ala Arg Arg Lys Trp Lys Gln Tyr Trp Val Thr Leu 65 70 75 80

Lys Gly Cys Thr Leu Leu Phe Tyr Glu Thr Tyr Gly Lys Asn Ser Met 85 90 95

Asp Gln Ser Ser Ala Pro Arg Cys Ala Leu Phe Ala Glu Asp Ser 11e 100 105 110

Val Gln Ser Val Pro Glu His Pro Lys Lys Glu Asn Val Phe Cys Leu 115 120 125

Ser Asn Ser Phe Gly Asp Val Tyr Leu Phe Gln Ala Thr Ser Gln Thr 130 135 140

Asp Leu Glu Asn Trp Val Thr Ala Val His Ser Ala Cys Ala Ser Leu 145 150 155 160

Phe Ala Lys Lys His Gly Lys Glu Asp Thr Leu Arg Leu Leu Lys Asn 165 170 175

Gln Thr Lys Asn Leu Leu Gln Lys IIe Asp Met Asp Ser Lys Met Lys 180 185 190

Lys Met Ala Glu Leu Gln Leu Ser Val Val Ser Asp Pro Lys Asn Arg 195 200 205 Lys Ala 11e Glu Asn Gln 11e Gln Gln Trp Glu Gln Asn Leu Glu Lys

	210					215					220				
	His	Met	Asp	Leu	Phe	Arg	Met	Arg	Cys		Leu	Λla	Ser	Leu	
225	C1	C1		D	230	10		C		235				C	240
GIY	61y	GIU	Leu		Asn	Pro	Lys	Ser		Leu	Ala	Ala	Ala		Лrg
D	C			245		61			250			C		255	C
Pro	Ser	Lys		Ala	Leu	ыу	Arg		Gly	J.J.e	Leu	Ser		Ser	Ser
Dha	u; a	۸1.	260	Val	Cua	C	A	265	۸	C	A 1 _	1	270	1	Δ
rne	піѕ	275	Leu	vai	Cys	261.	_	ASP	ASP	ser	мта		Arg	Lys	Arg
The	Lou		Lou	The	Cln	Ara	280	A 22.48	Aon	Lua	Luc	285	11.	Dha	Can
1111	290	261	Leu	1111	Gln	295	GTy	ΛI g	ASII	LyS	300	Gly	116	rne	361
Ser		Lve	G1v	Lou	Asp		Lou	Ala	Ara	lve		lve	Glu	Lvc	Λνα
305	LCu	Lys	Oly	1,00	310	1111	1.00	2116	na g	315	Oly	17,3	Olu	1.75	320
	Ser	He	Thr	Gln	Val	Asn	Glu	Leu	Leu		He	Tvr	Glv	Ser	
				325			0.0	1300	330		110	.,,	Oly	335	
Val	Asp	Glv	Val		Arg	Asp	Asn	Ala		Glu	He	Gln	Thr		Val
			340					345					350	- , -	
His	Phe	Gln	Asp	Asn	His	Glv	Va]	Thr	Val	Gly	lle	Lvs		Glu	His
		355					360			·		365			
Arg	Va1	Glu	Asp	He	Leu	Thr	Leu	Ala	Cys	Lys	Met	Arg	Gln	Leu	Glu
	370					375					380				
Pro	Ser	llis	Tyr	Gly	Leu	Gln	Leu	Arg	Lys	Leu	Val	Asp	Asp	Asn	Val
385					390					395					400
Glu	Tyr	Cys	He	Pro	Ala	Pro	Tyr	Glu	Tyr	Met	Gln	Gln	Gln	Val	Tyr
				405					410					415	
Asp	Glu	lle	Glu	Val	Phe	Pro	Leu	Asn	Val	Tyr	Asp	Val	Gln	Leu	Thr
			420					425					430		
Lys	Thr	Gly	Ser	Val	Cys	Asp	Phe	Gly	Phe	Ala	Va]	Thr	Ala	Gln	Va]
		435					440					445			
Asp	G1u	Arg	Gln	His	Leu	Ser	Arg	Пе	Phe	He	Se.r	Asp	Val	Leu	Pro
	450					455					460				
Asp	Gly	Leu	Ala	Tyr	Gly	Glu	G] y	Leu	Arg	Lys	Gly	Asn	Glu	He	Met
465					470					475					480
Thr	Leu	Asn	Gly	Glu	Ala	Val	Ser	Asp	Leu	Asp	Leu	Lys	Gln	Met	${\sf Glu}$

					485					490					495	
A	la	Leu	Phe	Ser	Glu	Lys	Ser	Val	Gly	Leu	Thr	Leu	He	Ala	Arg	Pro
				500					505					510		
Pı	ro	Asp	Thr	Lys	Ala	Thr	Leu	Cys	Thr	Ser	Trp	Ser	Asp	Ser	Asp	Leu
			515					520					525			
Pl	ne	Ser	Arg	Asp	Gln	Lys	Ser	Leu	Leu	Pro	Pro	Pro	Asn	Gln	Ser	Gln
		530					535					540				
L	eu	Leu	Glu	Glu	Phe	Leu	Asp	Asn	Phe	Lys	Lys	Asn	Thr	Ala	Asn	Asp
54	45					550					555					560
Pl	he	Ser	Asn	Val	Pro	Asp	He	Thr	Thr	Gly	Leu	Lys	Arg	Ser	G1n	Thr
					565					570					575	
A:	sp	Gly	Thr	Leu	Asp	Gln	Va]	Ser	His	Arg	Glu	Lys	Met	Glu	Gln	Thr
				580					585					590		
Pl	he	Arg	Ser	Ala	Glu	Gln	11e	Thr	Ala	Leu	Cys	Lys	Ser	Phe	Asn	Asp
			595					600					605			
S	er	Gln	Ala	Asn	Gly	Met	Glu	Gly	Pro	Arg	Glu	Asn	Gln	Лsp	Pro	Pro
		610					615					620				
P:	ro	Arg	Pro	Leu	Ala	Arg	His	Leu	Ser	Asp	Ala	Asp	Arg	Leu	Arg	Lys
6	25					630					635					640
Va	a l	He	Gln	Glu	Leu	Val	Asp	Thr	Glu	Lys	Ser	Tyr	Val	Lys	Asp	Leu
					645					650					655	
S	er	Cys	Leu	Phe	Glu	Leu	Tyr	Leu	Glu	Pro	Leu	Gln	Asn	Glu	Thr	Phe
				660					665					670		
L	eu	Thr	Gln	Asp	Glu	Met	Glu	Ser	Leu	Phe	Gly	Ser	Leu	Pro	Glu	Met
			675					680					685			
L	eu	Glu	Phe	Gln	Lys	Val	Phe	Leu	Glu	Thr	Leu	Glu	Asp	Gly	He	Ser
		690					695					700				
A	la	Ser	Ser	Asp	Phe	Asn	Thr	Leu	Glu	Thr	Pro	Ser	Gln	Phe	Arg	Lys
7	05					710					715					720
L	eu	Leu	Phe	Pro	Leu	Gly	Gly	Ser	Phe	Leu	Tyr	Tyr	Ala	Asp	His	Phe
					725					730					735	
L	ys	Leu	Tyr	Ser	Gly	Phe	Cys	Ala	Asn	His	Пе	Lys	Val	G]n	Lys	Val
				740					745					750		
L	eu	G]u	Arg	Ala	Lys	Thr	Asp	Lys	Λla	Phe	Lys	Ala	Phe	Leu	Asp	Ala
			755					760					765			
Λ	rσ	Asn	Pro	The	Lve	Gln	Hie	Ser	Ser	Thr	Leu	G1v	Ser	Tyr	Leu	مال

	770					775					780				
Lys	Pro	Val	Gln	Arg	Val	Leu	Lys	Tyr	Pro	Leu	Leu	Leu	Lys	Glu	Leu
785					790					795					800
Val	Ser	Leu	Thr	Asp	Gln	Glu	Ser	Glu	Glu	His	Tyr	His	Leu	Thr	G] u
				805					810					815	
Ala	Leu	Lys	Ala	Met	Glu	Lys	Val	Ala	Ser	His	lle	Asn	Glu	Met	Gln
			820					825					830		
Lys	lle	Tyr	Glu	Asp	Tyr	Gly	Thr	Val	Phe	Asp	Arg	Leu	Val	Ala	Glu
		835					840					845			
Gln	Ser	Gly	Thr	Glu	Lys	Glu	Gln	Pro	Glu	Trp	Ser	Ser	Glu	Val	Met
	850					855					860				
Asp	Val	Leu	Asp	Pro	Arg	Gly	Lys	Leu	Thr	Lys	Gly	Thr	Leu	Glu	G] u
865					870					875					880
Pro	Arg	Thr	Leu	Val	Thr	Glu	Leu	Ser	Met	Gly	Glu	Leu	Leu	Met	His
				885					890					895	
Ser	Thr	Val	Ser	Trp	Leu	Asn	Pro	Phe	Leu	Ser	Leu	Gly	Lys	Ala	Arg
			900					905					910		
Lys	Asp	Leu	Glu	Leu	Thr	Val		Val	Phe	Lys	Arg	Ala	Val	lle	Leu
		915					920					925			
Va]		Lys	Lys	Asn	Cys	Lys	Leu	Lys	Lys	Lys	Leu	Pro	Ser	Asn	Ser
	930					935					940				
	Pro	Ala	His	Asn		Thr	Asp	Leu	Asp	Pro	Phe	Lys	Phe	Arg	
945					950					955					960
Leu	He	Pro	He		Ala	Leu	Gln	Va]		Leu	Gly	Asn	Pro	Ala	Gly
ar i	0.1			965			0.1		970		m.			975	
Ihr	61u	Asn		Ser	11e	Trp	Glu		He	HIS	Ihr	Lys		Glu	He
C1	C1	A	980	C1	ті.	11.	DI	985	3	C	•	C	990	C	C 1
GIU	ыу		Pro	GIU	ını			Gin	Leu	Lys			Asp	Ser	61u
Con	Luc	995	Aan	110	Vol		1000 Va.1	11.	A	Can.		1005	Λ	C1	A
	010	1111	ASII	116		Lys 1015	vai	He	Arg			Leu	Arg	Glu	ASH
		Λισ	Hic	Tla			Clu	Lou	Dro		020	Luc	Thu	Cys	1
1025		Mg	111.5		030	cys	ora	Leu		035	01u	Lys	1111		1.) S :040
		Len	Val			lve	Aen	Aro			Val	Ser	Ala	Lys	
.1p	. 1.1 6	Lou		045	LCU	درد	.1311		050	. 1 0	, ci 1	١٥٦		055	r,c·u
Ala	Sor	Sor	Ara		Lou	Lvc	Val			Aan	San	Can	C 0.32	. A	C1

Trp Thr Gly Glu Thr Gly Lys Gly Thr Leu Leu Asp Ser Tyr Glu Gly Ser Leu Ser Ser Gly Thr Gln Ser Ser Gly Cys Pro Thr Ala Glu Gly Arg Gln Asp Ser Lys Ser Thr Ser Pro Gly Lys Tyr Pro His Pro Gly Leu Ala Asp Phe Ala Asp Asn Leu Ile Lys Glu Ser Asp lle Leu Ser Asp Glu Asp Asp Asp His Arg Gln Thr Val Lys Gln Gly Ser Pro Thr Lys Asp lle Glu lle Gln Phe Gln Arg Leu Arg lle Ser Glu Asp Pro Asp Val His Pro Glu Ala Glu Gln Gln Pro Gly Pro Glu Ser Gly Glu Gly Gln Lys Gly Gly Glu Gln Pro Lys Leu Val Arg Gly His Phe Cys Pro Ile Lys Arg Lys Thr Asn Ser Thr Lys Arg Asp Arg Gly Thr Leu Leu Lys Ala Gln 11e Arg His Gln Ser Leu Asp Ser Gln Ser Glu Asn Ala Thr Ile Asp Leu Asn Ser Val Leu Glu Arg Glu Phe Ser Val Gln Ser Leu Thr Ser Val Val Ser Glu Glu Cys Phe Tyr Glu Thr Glu Ser His Gly Lys Ser

<210> 3322

<211> 514

<212> PRT

<213> Homo sapiens

<400> 3322

Met Glu Glu Asn Val Phe Trp Glu Cys Lys Ala Asn Gly Arg Pro Lys

1				5					10					15	
Pro	Thr	Tyr	Lys	Trp	Leu	Lys	Asn	Gly	Glu	Pro	Leu	Leu	Thr	Arg	Asp
			20					25					30		
Arg	lle	G1n	lle	Glu	Gln	Gly	Thr	Leu	Asn	He	Thr	He	Val	Asn	Leu
		35					40					45			
Ser	Asp	Ala	Gly	Met	Tyr	Gln	Cys	Leu	Ala	Glu	Asn	Lys	His	Gly	Val
	50					55					60				
He	Phe	Ser	Asn	Ala	Glu	Leu	Ser	Val	He	Ala	Val	Gly	Pro	Λsp	Phe
65					70					75					80
Ser	Arg	Thr	Leu	Leu	Lys	Arg	Val	Thr	Leu	Val	Lys	Val	Gly	Gly	Glu
				85					90					95	
Val	Va]	He	Glu	Cys	Lys	Pro	Lys	Ala	Ser	Pro	Lys	Pro	Va]	Tyr	Thr
			100					105					110		
Trp	Lys	Lys	Gly	Arg	Asp	He	Leu	Lys	Glu	Asn	Glu	Arg	He	Thr	He
		115					120					125			
Ser	Glu	Asp	Gly	Asn	Leu	Arg	lle	He	Asn	Val	Thr	Lys	Ser	Asp	Ala
	130					135					140				
Gly	Ser	Tyr	Thr	Cys	lle	Ala	Thr	Asn	His	Phe	Gly	Thr	Ala	Ser	Ser
145					150					155					160
Thr	Gly	Asn	Leu	Val	Val	Lys	Asp	Pro	Thr	Arg	Val	Met	Val	Pro	Pro
				165					170					175	
Ser	Ser	Met	Asp	Val	Thr	Val	Gly	Glu	Ser	He	Val	Leu	Pro	Cys	Gln
			180					185					190		
Val	Thr		Asp	His	Ser	Leu		He	Val	Phe	Thr		Ser	Phe	Asn
		195					200					205			
GIy		Leu	He	Asp	Phe			Asp	Gly	Asp		Phe	G] u	Arg	Val
6.1	210		C		0.1	215			7.1		220		0.7		
	Gly	Asp	Ser	Ala		Asp	Leu	Met	He		Asn	He	GIn	Leu	
225	4.1	C1	,	т	230	0	11 .	17 7	C1	235	C	V: 1			240
111 S	Ala	ыу	Lys		val	Uys	меι	val		Ihr	Ser	Va1	Asp		Leu
Can	A16	A 1 a	11.	245	1	11.	V - 1	A	250	D	D	C1	D	255 D	C1
ser	Ата	ATA	Ala	ASP	Leu	116	val		GIY	Pro	Pro	O1 ÿ		Pro	61u
۸1	Vr. 1	Thu	260	Λ	C1	11-	TL	265	Tl	ть	۸1	C1	270	C	Т
MIG	v d 1	275	lle	ush	oru	116		ASP	mr	mr	ита		ren	ser	тгр
Ara	Dro		Pro	Asp	Acn	uic	280 Sor	Dno	Ha	Tlan	Mot	285 Tur	Vol	116	C1n

	290					295					300				
Ala	Arg	Thr	Pro	Phe	Ser	Val	Gly	Trp	Gln	Ala	Val	Ser	Thr	Val	Pro
305					310					315					320
Glu	Leu	lle	Asp	Gly	Lys	Thr	Phe	Thr	Ala	Thr	Val	Val	Gly	Leu	Asn
				325					330					335	
Pro	Trp	Val	Glu	Tyr	Glu	Phe	Arg	Thr	Val	Ala	Ala	Asn	Val	He	Gly
			340					345					350		
Пe	Gly	Glu	Pro	Ser	Arg	Pro	Ser	Glu	Lys	Arg	۸rg	Thr	Glu	Glu	Ala
		355					360					365			
Leu	Pro	Glu	Val	Thr	Pro	Ala	Asn	Val	Ser	Gly	G1y	Gly	Gly	Ser	Lys
	370					375					380				
Ser	Glu	Leu	Val	Пe	Thr	Trp	Glu	Thr	Val	Pro	Glu	Glu	Leu	Gln	Asn
385					390					395					400
Gly	Arg	Gly	Phe	G1y	Tyr	Val	Val	Ala	Phe	Arg	Pro	Tyr	Gly	Lys	Met
				405					410					415	
lle	Trp	Met	Leu	Thr	Val	Leu	Ala	Ser	Ala	Asp	Ala	Ser	Arg	Tyr	Val
			420					425					430		
Phe	Arg	Asn	Glu	Ser	Val	His	Pro	Phe	Ser	Pro	Phe	Glu	Val	Lys	Val
		435					440					445			
Gly	Val	Phe	Asn	Asn	Lys	Gly	Glu	Gly	Pro	Phe	Ser	Pro	Thr	Thr	Val
	450					455					460				
Val	Tyr	Ser	Ala	Glu	Glu	Glu	Pro	Thr	Lys	Pro	Pro	Ala	Ser	lle	Phe
465					470					475					480
Ala	Arg	Ser	Leu	Ser	Ala	Thr	Asp	He	Glu	Val	Phe	Trp	Ala	Ser	Pro
				485					490					495	
Leu	GIu	Lys	Asn	Arg	Gly	Arg	lle	Gln	Gly	Tyr	Glu	Val	Lys	Tyr	Trp
			500					505					510		

⟨210⟩ 3323

Arg His

<211> 429

<212> PRT

<213> Homo sapiens

<400)> 33	323													
Met	Leu	Gly	Lys	Arg	Phe	Pro	Asn	Ile	Lys	Val	He	Glu	Ser	Gly	Val
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Lys	Gln	Leu	Lys	Ser	Glu	Glu	His	Cys	He	Val	Thr	Glu	Asp	Gly	Asn
			20					25					30		
Gln	His	Val	Tyr	Lys	Lys	Leu	Cys	Leu	Cys	Ala	Gly	Ala	Lys	Pro	Lys
		35					40					45			
Leu	Ile	Cys	Glu	Gly	Asn	Pro	Tyr	Val	Leu	Gly	He	Arg	Asp	Thr	Asp
	50					55					60				
Ser	Ala	Gln	Glu	Phe	Gln	Lys	Gln	Leu	Thr	Lys	Ala	Lys	Arg	He	Met
65					70					75					80
Пe	He	Gly	Asn	Gly	Gly	Пе	Ala	Leu	Glu	Leu	Val	Tyr	Glu	Πe	Glu
				85					90					95	
Gly	Cys	Glu	Val	11e	Trp	Ala	11e	Lys	Asp	Lys	Ala	He	Gly	Asn	Thr
			100					105					110		
Phe	Phe	Asp	Ala	Gly	Ala	Ala	G] u	Phe	Leu	Thr	Ser	Lys	Leu	lle	Ala
		115					120					125			
Glu	Lys	Ser	Glu	Ala	Lys	He	Ala	His	Lys	Arg	Thr	Arg	Tyr	Thr	Thr
	130					135					140				
Glu	Gly	Arg	Lys	Lys	Glu	Ala	Arg	Ser	Lys	Ser	Lys	Ala	Asp	Asn	Val
145					150					155					160
Gly	Ser	Ala	Leu	Gly	Pro	Asp	Trp	His	Glu	Gly	Leu	Asn	Leu	Lys	Gly
				165					170					175	
Thr	Lys	Glu	Phe	Ser	His	Lys	lle	llis	Leu	Glu	Thr	Met	Cys	Glu	Val
			180					185					190		
Lys	Lys	Ile	Tyr	Leu	Gln	Asp	Glu	Phe	Arg	lle	Leu	Lys	Lys	Lys	Ser
		195					200					205			
Phe	Thr	Phe	Pro	Arg	Asp	His	Lys	Ser	Va]	Thr	Ala	Asp	Thr	Glu	Met
	210					215					220				
Trp	Pro	Val	Tyr	Val	Glu	Leu	Thr	Asn	Glu	Lys	lle	Tyr	Gly	Cys	Asp
225					230					235					240
Phe	lle	Va]	Ser	Ala	Thr	Gly	Val	Thr	Pro	Asn	Val	Glu	Pro	Phe	Leu
				245					250					255	
His	Gly	Asn	Ser	Phe	Asp	Leu	Gly	Glu	Asp	Gly	Gly	Leu	Lys	Val	Asp
			260					265					270		
Asp	His	Met	His	Thr	Ser	Leu	Pro	Asp	He	Tyr	Λla	Ala	Gly	Asp	Πle

		275					280					285			
Cys	Thr	Thr	Ser	Trp	Gln	Leu	Ser	Pro	Val	Trp	Gln	Gln	Met	Arg	Leu
	290					295					300				
Trp	Thr	Gln	Ala	Arg	Gln	Met	G1 y	Trp	Tyr	Ala	Ala	Lys	Cys	Met	Ala
305					310					315					320
Ala	Ala	Ser	Ser	Gly	Asp	Ser	lle	Asp	Met	Asp	Phe	Ser	Phe	Glu	Leu
				325					330					335	
Phe	Ala	His	Val	Thr	Lys	Phe	Phe	Asn	Tyr	Lys	Val	Val	Leu	Leu	Gly
			340					345					350		
Lys	Tyr	Asn	Ala	Gln	Gly	Leu	Gly	Ser	Asp	His	${\tt Glu}$	Leu	Met	Leu	Arg
		355					360					365			
Cys	Thr	Lys	Gly	Arg	Glu	Tyr	He	Lys	Val	Val	Met	Gln	Asn	Gly	Arg
	370					375					380				
Met	Met	Gly	Ala	Val	Leu	lle	Gly	Glu	Thr	Asp	Leu	Glu	Glu	Thr	Phe
385					390					395					400
Glu	Asn	Leu	He	Leu	Asn	Gln	Met	Asn	Leu	Ser	Ser	Tyr	Gly	Glu	Asp
				405					410					415	
Leu	Leu	Asp	Pro	Asn	lle	Asp	Ile	Glu	Asp	Tyr	Phe	Asp			
			420					425							

<210> 3324

<211> 1130

<212> PRT

<213> Homo sapiens

<400> 3324

Ala Pro Ala Thr Pro Leu Pro Leu Val Val Arg Pro Leu Phe Ser Val

65					70					75					80
Ala	Pro	Gly	Asp	Arg	Ala	Leu	Ser	Leu	Glu	Arg	Ala	Arg	Gly	Thr	Gly
				85					90					95	
Ala	Ser	Met	Ala	Val	Ala	Лlа	Arg	Ser	Gly	Arg	Arg	Arg	Arg	Ser	Gly
			100					105					110		
Ala	Asp	Gln	Glu	Lys	Ala	Glu	Arg	Gly	Glu	Gly	Ala	Ser	Arg	Ser	Pro
		115					120					125			
Arg	Gly	Val	Leu	Arg	Asp	Gly	Gly	Gln	Gln	Glu	Pro	Gly	Thr	Arg	Glu
	130					135					140				
Arg	Asp	Pro	Asp	Lys	Ala	Thr	Arg	Phe	Arg	Met	Glu	Glu	Leu	Arg	Leu
145					150					155					160
Thr	Ser	Thr	Thr	Phe	Ala	Leu	Thr	Gly	Asp	Ser	Ala	His	Asn	Gln	Ala
				165					170					175	
Met	Val	His	Trp	Ser	Gly	His	Asn	Ser	Ser	Val	He	Leu	He	Leu	Thr
			180					185					190		
Lys	Leu	Tyr	Asp	Tyr	Asn	Leu	Gly	Ser	lle	Thr	Glu	Ser	Ser	Leu	Trp
		195					200					205			
Arg	Ser	Thr	Asp	Tyr	Gly	Thr	Thr	Tyr	Glu	Lys	Leu	Asn	Asp	Lys	Val
	210					215					220				
Gly	Leu	Lys	Thr	Ile	Leu	Ser	Tyr	Leu	Tyr	Val	Cys	Pro	Thr	Asn	Lys
225					230					235					240
Arg	Lys	11e	Met	Leu	Leu	Thr	Asp	Pro	Glu	He	Glu	Ser	Ser	Leu	Leu
				245					250					255	
lle	Ser	Ser		Glu	Gly	Ala	Thr	_	Gln	Lys	Tyr	Arg		Asn	Phe
			260					265					270		
Tyr	He		Ser	Leu	Leu	Phe		Pro	Lys	Gln	Glu		Trp	lle	Leu
		275	21				280					285	D)	0.1	
Ala		Ser	GIn	Asp	GIn		Leu	Tyr	Ser	Ser		Glu	Phe	Gly	Arg
	290 T	61	,	7.1	0.1	295	61	., 1	V 1	D	300		131	T	T.
	Trp	61n	Leu	11e		Glu	Gly	Va!	Val		Asn	Arg	Phe	Tyr	
305	W = 1	11 - 4	C1	C	310	1	C1	D	A	315	V - 1	11.5	1	C1	320
Ser	vai	Mer	GIŸ		ASN	Lys	GIU	Pro		Leu	vaı	1115	Leu	Glu	Ala
A~	The	Ve 1	Λ	325	u: ~	C	ui ~	Т	330	The	Cv	Λ	Med	335	A ~ ==
weg	HIII.	I. IS V	340	оту	nis	ser	шѕ	345	Leu	1111	Cys	Arg	мет 350	Gln	ASII
Cve	Thr	Glu		Aen	Arg	Aen	Gla		Phe	Pro	Glv	Tyr		Asp	Pro
UYO	1 1 1 1 1	\mathbf{u}	1110	11011	111 =	11011	0.111	110	1 110	110	UIV	1 1 1	110	USD	110

		355					360					365			
Asp	Ser	Leu	lle	Val	Gln	Asp	His	Tyr	Va]	Phe	Val	Gln	Leu	Thr	Ser
	370					375					380				
Gly	Gly	Arg	Pro	His	Tyr	Tyr	Val	Ser	Tyr	Arg	Arg	Asn	Ala	Phe	Ala
385					390					395					400
Gln	Met	Lys	Leu	Pro	Lys	Tyr	Ala	Leu	Pro	Lys	Asp	Met	His	Val	116
				405					410					415	
Ser	Thr	Asp	Glu	Asn	Gln	Val	Phe	Ala	Ala	Val	Gln	Glu	Trp	Asn	G1n
			420					425					430		
Asn	Asp	Thr	Tyr	Asn	Leu	Tyr	lle	Ser	Asp	Thr	Arg	Gly	Val	Tyr	Phe
		435					440					445			
Thr	Leu	Ala	Leu	Glu	Asn	Va]	Gln	Ser	Ser	Arg	Gly	Pro	Glu	G1 y	Asn
	450					455					460				
11e	Met	He	Asp	Leu	Tyr	Glu	Val	Ala	Gly	He	Lys	G]y	Met	Phe	Leu
465					470					475					480
Ala	Asn	Lys	Lys	He	Asp	Asn	Gln	Val	Lys	Thr	Phe	lle	Thr	Tyr	Asn
				485					490					495	
Lys	Gly	Arg	Asp	Trp	Arg	Leu	Leu	Gln	Ala	Pro	Asp	Thr	Asp	Leu	Arg
			500					505					510		
Gly	Asp	Pro	Val	His	Cys	Leu	Leu	Pro	Tyr	Cys	Ser	Leu	His	Leu	His
		515					520					525			
Leu	Lys	Val	Ser	Glu	Asn	Pro	Tyr	Thr	Ser	Gly	He	lle	Ala	Ser	Lys
	530					535					540				
Asp	Thr	Ala	Pro	Ser	He	lle	Va1	Ala	Ser	Gly	Asn	11e	Gly	Ser	Glu
545					550					555					560
Leu	Ser	Asp	Thr	Asp	He	Ser	Met	Phe	Val	Ser	Ser	Asp	Ala	Gly	Asn
				565					0.0					575	
Thr	Trp	Arg		He	Phe	Glu	Glu		His	Ser	Val	Leu	Tyr	Leu	Asp
			580					585					590		
Gln	Gly		Val	Leu	Val	Ala		Lys	His	Thr	Ser		Pro	He	Arg
		595					600					605			
His		Trp	Leu	Ser	Phe		Glu	Gly	Arg	Ser		Ser	Lys	Tyr	Ser
	610	_		_		615					620				
	Thr	Ser	He	Pro		Phe	Val	Asp	Gly		Leu	Gly	Glu	Pro	
625	0.1	m			630					635		_			640
GTu	Glu	Thr	Leu	He	Met	Thr	Val	Phe	Glv	His	Phe	Ser	His	Arg	Ser

				645					650					655	
Glu	Trp	Gln	Leu	Val	Lys	Val	Asp	Tyr	Lys	Ser	Пe	Phe	Asp	Arg	Arg
			660					665					670		
Cys	Ala	Glu	Glu	Asp	Tyr	Arg	Pro	Trp	Gln	Leu	llis	Ser	Gln	Gly	Glu
		675					680					685			
Ala	Cys	lle	Met	Gly	Ala	Lys	Arg	lle	Tyr	Lys	Lys	Arg	Lys	Ser	Glu
	690					695					700				
Arg	Lys	Cys	Met	Gln	Gly	Lys	Tyr	Ala	Gly	Ala	Met	Glu	Ser	Glu	Pro
705					710					715					720
Cys	Val	Cys	Thr	Glu	Ala	Asp	Phe	Asp	Cys	Asp	Tyr	Gly	Tyr	Glu	Arg
				725					730					735	
His	Ser	Asn	Gly	Gln	Cys	Leu	Pro	Ala	Phe	Trp	Phe	Asn	Pro	Ser	Ser
			740					745					750		
Leu	Ser	Lys	Asp	Cys	Ser	Leu	G1 y	Gln	Ser	Tyr	Leu	Asn	Ser	Thr	G1 y
		755					760					765			
Tyr	Arg	Lys	Val	Val	Ser	Asn	Asn	Cys	Thr	Asp	Gly	Val	Arg	Glu	GIn
	770					775					780				
Tyr	Thr	Ala	Lys	Pro	Gln	Lys	Cys	Pro	Gly	Lys	Ala	Pro	Arg	Gly	Leu
785					790					795					800
Arg	Пе	Val	Thr	Ala	Asp	Gly	Lys	Leu	Thr	Ala	Glu	Gln	Gly	His	Asn
				805					810					815	
Val	Thr	Leu	Met	Val	Gln	Leu	Glu	Glu	G] y	Asp	Val	Gln	Arg	Thr	Leu
			820					825					830		
Пе	GIn	Val	Asp	Phe	Gly	Asp	G1 y	He	Ala	Val	Ser	Tyr	Val	Asn	Leu
		835					840					845			
Ser	Ser	Met	Glu	Asp	Gly	He	Lys	His	Val	Tyr	G1n	Asn	Val	Gly	He
	850					855					860				
Phe	Arg	Val	Thr	Val	Gln	Val	Asp	Asn	Ser	Leu	Gly	Ser	Asp	Ser	Ala
865					870					875					880
Va]	Leu	Tyr	Leu	His	Val	Thr	Cys	Pro	Leu	Glu	His	Val	His	Leu	Ser
				885					890					895	
Leu	Pro	Phe	Val	Thr	Thr	Lys	Asn	Lys	Glu	Val	Asn	Ala	Thr	Ala	Val
			900					905					910		
Leu	Trp	Pro	Ser	Gln	Va]	Gly	Thr	Leu	Thr	Tyr	Val	Trp	Trp	Tyr	Gly
		915					920					925			

Asn Asn Thr Glu Pro Leu Ile Thr Leu Glu Gly Ser Ile Ser Phe Arg Phe Thr Ser Glu Gly Met Asn Thr Ile Thr Val Gln Val Ser Ala Gly Asn Ala Ile Leu Gln Asp Thr Lys Thr Ile Ala Val Tyr Glu Glu Phe Arg Ser Leu Arg Leu Ser Phe Ser Pro Asn Leu Asp Asp Tyr Asn Pro Asp Ile Pro Glu Trp Arg Arg Asp Ile Gly Arg Val Ile Lys Lys Ser Leu Val Glu Ala Thr Gly Val Pro Gly Gln His Ile Leu Val Ala Val Leu Pro Gly Leu Pro Thr Thr Ala Glu Leu Phe Val Leu Pro Tyr Gln Asp Pro Ala Gly Glu Asn Lys Arg Ser Thr Asp Asp Leu Glu Gln lle Ser Glu Leu Leu 11e His Thr Leu Asn Gln Asn Ser Val His Phe Glu Leu Lys Pro Gly Val Arg Val Leu Val His Ala Ala His Leu Thr Ala Ala Pro Leu Val Asp Leu Thr Pro Thr His Ser Gly Ser Ala Met Leu Val Leu Leu Ser Val Val Phe Val Gly Leu Ala Val Phe Val lle Tyr Lys Phe Lys Arg Lys Tyr Phe His Ser Cys

<210> 3325

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3325

Met Met Ser Asp Gly Lys Leu Gly Arg Gln Ser Val Asp Ser Pro Cys

1 5 10 15

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Ser Gly Thr Thr Cys Ser Leu Thr Ala Ala Gly Gly His Thr Thr Arg
             20
                                 25
lle Ala Leu Leu Cys His Leu Val lle Val Phe Phe Ala Leu Thr Glu
         35
                             40
                                                 45
Asp Arg Lys Gly Gly Lys Ile Ser Phe Cys Ala His Thr Pro Leu Asn
                         55
Cys Met Phe Gly Phe Phe Cys Phe Val Lys Gly Cys Lys Thr Ser Ser
                     70
                                         75
Ser Cys Ser Thr Ala Asn Thr Arg Gly Gln His Pro Ala Ser Cys Leu
                 85
                                     90
Cys Phe Pro Ala Gly Arg Thr His Arg Gln Ser Gly Asn Leu Thr Phe
                               105
Pro Arg Ser Glu Asn Gly Leu Phe Ser Ser Glu Val Met 11e Arg Glu
        115
                            120
                                                 125
Ser Leu Leu 11e Phe Val 11e His Thr Lys Thr Leu Thr Ser Gly Glu
                        135
                                            140
Lys Leu Asp Thr Leu Asn Asn Glu Lys Ser Glu Gln Ala Phe Arg Gly
145
                    150
                                        155
Cys Val Ser His Thr Glu Gly Ala Ser Pro Trp Ala His Ser Gln Asp
                                    170
                165
Pro Ser Phe Thr Asp His Arg Gly Cys Val Leu Gln Val Ala Asp Thr
                                185
                                                     190
Ala Leu Trp Phe
        195
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<210> 3326

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3326

Met Leu Ser Leu Glu Cys Thr Gln Leu Pro His His Ala Ser Cys Thr
1 5 10 15

Cys Cys Ser Thr Ala Pro Pro Ser Val Ser Ala Ala Arg Pro Ser Pro
20 25 30

Cys Ser lle Val Val Ser Phe Asp Cys Ala Gly Trp Arg Val Pro Cys Pro Pro Ser Leu Val Phe Gln Asn Ser Phe Gly Trp Phe Cys Thr Cys Val Phe His Met Val Phe Thr Ser Ile Val Arg Lys Thr Lys His Phe Ser Lys Ser His Leu Glu Ser Phe Asn Pro Phe Met Ser Val Ser Ala Lys Phe Ser Cys Gly Leu Ala Gly Leu Leu Cys Ser Val Pro Glu Arg Ala Gly Leu Ser Leu Gly Ile Cys Arg His Pro Leu Trp His Ser Ala Gly Thr Leu Ser Ser Asn Leu Leu Ala Pro Ser Ala Arg Trp Asp His

<210> 3327

<211> 184

<212> PRT

<213> Homo sapiens

<400> 3327

Met Tyr Phe Tyr Asp Gly Val Ser Arg Asp Ala Ala Ser Ala Ala Leu Ala Asp Ala Ala Glu Glu Leu Leu Asp Arg Leu Ala Ser His Ser Met Leu Pro Ser Asp Val Ser lle Leu Tyr His Met Lys Thr Leu Leu Leu Leu Gln Asp Thr Glu Arg Leu Lys His Ala Leu Glu Met Phe Pro Glu His Cys Thr Met Pro Pro Gly Gly Lys Ser Glu Ala Gln Arg Ala Trp Ala Asn Gly Thr Gly His Thr Ala His Gln Trp Leu His Val Ser Ser

Asp Leu Gly Leu Leu Ser Val Phe Pro 11e Ser Met Thr Leu Thr

<210> 3328

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3328

 Met
 Gly
 Ser
 Val
 Phe
 Leu
 Gly
 Leu
 Leu
 Leu
 Cys
 Lys
 Ala
 Pro

 1
 5
 5
 6
 10
 10
 10
 15
 15
 15

 Ala
 Leu
 Pro
 Asp
 Ser
 Ser
 Pro
 Pro
 Asp
 Ala
 Lys
 Val
 Gly
 Val
 Leu

 Phe
 Leu
 Pro
 Leu
 Pro
 Pro
 Asp
 Leu
 Glu
 Gly
 He
 Cys
 Val
 Pro

 Ala
 Val
 Pro
 Pro
 Ala
 Thr
 Pro
 Gly
 Asp
 Ser
 Pro
 Pro
 His

50 55 60

Thr Ser Pro His Leu lle Gly Asn Phe Pro Leu Pro Asp Leu Arg Ser 65 70 75 80

lle Ser Thr Pro Ser Leu Gln Asn Gly Asp Asn Glu Leu Thr Lys Ser 85 90 95

Met Phe Asn Thr Leu Leu Thr Glu Leu Thr Met 11c Leu Gly Gly Ser 100 105 110

Gly Met

⟨210⟩ 3329

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<211> 326
<212> PRT
<213> Homo sapiens
<400> 3329
Met Lys Cys Thr Ala Val Leu Cys Cys Arg Met Ala Pro Leu Gln Lys
                  5
                                     10
Ala Gln Ile Val Arg Met Val Lys Asn Leu Lys Gly Ser Pro lle Thr
             20
                                 25
                                                      30
Leu Ser Ile Gly Asp Gly Ala Asn Asp Val Ser Met 11e Leu Glu Ser
His Val Gly 11e Gly 11e Lys Gly Lys Glu Gly Arg Gln Ala Ala Arg
     50
                         55
                                              60
Asn Ser Asp Tyr Ser Val Pro Lys Phe Lys His Leu Lys Lys Leu Leu
                                          75
                     70
Leu Ala His Gly His Leu Tyr Tyr Val Arg 11e Ala His Leu Val Gln
                                     90
                 85
Tyr Phe Phe Tyr Lys Asn Leu Cys Phe Ile Leu Pro Gln Phe Leu Tyr
            100
                                105
                                                     110
Gln Phe Phe Cys Gly Phe Ser Gln Gln Pro Leu Tyr Asp Ala Ala Tyr
                            120
Leu Thr Met Tyr Asn Ile Cys Phe Thr Ser Leu Pro Ile Leu Ala Tyr
                        135
                                             140
Ser Leu Leu Glu Gln His Ile Asn Ile Asp Thr Leu Thr Ser Asp Pro
                                                             160
145
                    150
                                         155
Arg Leu Tyr Met Lys 11e Ser Gly Asn Ala Met Leu Gln Leu Gly Pro
                165
                                    170
Phe Leu Tyr Trp Thr Phe Leu Ala Ala Phe Glu Gly Thr Val Phe Phe
            180
                                185
                                                     190
Phe Gly Thr Tyr Phe Leu Phe Gln Thr Ala Ser Leu Glu Glu Asn Gly
                            200
                                                 205
Lys Val Tyr Gly Asn Trp Thr Phe Gly Thr 11e Val Phe Thr Val Leu
                                             220
    210
                        215
Val Phe Thr Val Thr Leu Lys Leu Ala Leu Asp Thr Arg Phe Trp Thr
```

Trp Ile Asn His Phe Val Ile Trp Gly Ser Leu Ala Phe Tyr Val Phe 250 245 Phe Ser Phe Phe Trp Gly Gly Ile Ile Trp Pro Phe Leu Lys Gln Gln 260 265 270 Arg Met Tyr Phe Val Phe Ala Gln Met Leu Ser Ser Val Ser Thr Trp 280 275 285 Leu Ala 11e 11e Leu Leu 11e Phe 11e Ser Leu Phe Pro Glu 11e Leu 295 300 Leu Ile Val Leu Lys Asn Val Arg Arg Arg Ser Ala Arg Val His His 305 310 315 320 Leu Ile Ser Ser Ser Ala 325

<210> 3330

<211> 913

<212> PRT

<213> Homo sapiens

<400> 3330

 Met Pro Gly Glu Ala Val Glu Tyr His Ser Ile Gln Leu Ile Arg Asp

 1
 5
 10
 15

 Glu Phe Leu Met Asn Val Gln Lys Phe Ala Ser Asn Ile Gln Arg Thr
 20
 25
 30

 Met Gln Gln Leu Glu Gly Glu Ile Lys Leu Glu Met Pro Ile Ile Ser
 35
 40
 45

Val Glu Gly Glu Val Ser Asp Leu Ala Ala Asp Pro Glu Thr Val Asp 50 55 60

lle Leu Glu Gln Cys Val lle Asn Trp Leu Asn Gln lle Ser Thr Ala 65 70 75 80

Val Glu Ala Gln Leu Lys Lys Thr Pro Gln Gly Lys Gly Pro Leu Ala 85 90 95

Glu lle Glu Phe Trp Arg Glu Arg Asn Ala Thr Leu Ser Ala Leu His 100 105 110

Glu Gln Thr Lys Leu Pro lle Val Arg Lys Val Leu Asp Val lle Lys 115 120 125

Glu		Asp	Ser	Met	Leu		Ala	Asn	Leu	Gln		Val	Phe	Thr	Glu
	130					135					140				
Leu	Phe	Lys	Phe	His	Thr	Glu	Ala	Ser	Asp	Asn	Val	Arg	Phe	Leu	Ser
145					150					155					160
Thr	Val	Glu	Arg	Tyr	Phe	Lys	Asn	He	Thr	His	Gly	Ser	Gly	Phe	His
				165					170					175	
Val	Val	Leu	Asp	Thr	He	Pro	Ala	Met	Met	Ser	Ala	Leu	Arg	Met	Val
			180					185					190		
Trp	Ile	lle	Ser	Arg	His	Tyr	Asn	Lys	Asp	Glu	Arg	Met	lle	Pro	Leu
		195					200					205			
Met	Glu	Arg	Ile	Ala	Trp	Glu	He	Ala	Glu	Arg	Val	Cys	Arg	Val	Val
	210					215					220				
Asn	Leu	Arg	Thr	Leu	Phe	Lys	Glu	Asn	Arg	Ala	Ser	Ala	Gln	Ser	Lys
225					230					235					240
Thr	Leu	Glu	Ala	Arg	Asn	Thr	Leu	Arg	Leu	Trp	Lys	Lys	Ala	Tyr	Phe
				245					250					255	
Asp	Thr	Arg	Ala	Lys	He	Glu	Ala	Ser	Gly	Arg	Glu	Asp	Arg	Trp	Glu
			260					265					270		
Phe	Asp	Arg	Lys	Arg	Leu	Phe	Glu	Arg	Thr	Asp	Tyr	Met	Ala	Thr	He
		275					280					285			
Cys	Gln	Asp	Leu	Ser	Asp	Val	Leu	Gln	Val	Leu	Glu	Glu	Phe	Tyr	Asn
	290					295					300				
He	Phe	Gly	Pro	Glu	Leu	Lys	Ala	Val	Thr	Gly	Asp	Pro	Lys	Arg	11e
305					310					315					320
Asp	Asp	Val	Leu	Cys	Arg	Val	Asp	Gly	Leu	Val	Thr	Pro	Met	Glu	Asn
				325					330					335	
Leu	Thr	Phe	Asp	Pro	Phe	Ser	lle	Lys	Ser	Ser	G].n	Phe	Trp	Lys	Tyr
			340					345					350		
Val	Met	Asp	Glu	Phe	Lys	11e	Glu	Va]	Leu	He	Лѕр	lle	11e	Asn	Lys
		355					360					365			
Пe	Phe	Val	Gln	Asn	Leu	Glu	Asn	Pro	Pro	Leu	Tyr	Lys	Asn	His	Pro
	370					375					380				
Pro	Val	Ala	Gly	Ala	lle	Tyr	Trp	Glu	Arg	Ser	Leu	Phe	Phe	Arg	11e
385					390					395					400
Lys	His	Thr	He	Leu	Arg	Phe	Gln	Glu	Val	Gln	Glu	He	Leu	Asp	Ser

				405					410					415	
Asp	Arg	Gly	Gln	Glu	Val	Lys	Gln	Lys	Tyr	Leu	Glu	Val	Gly	Arg	Thr
			420					425					430		
Met	Lys	Glu	Tyr	Glu	Asp	Arg	Lys	Tyr	Glu	Gln	Trp	Met	Glu	Val	Thr
		435					440					445			
Glu	GIn	Val	Leu	Pro	Ala	Leu	Met	Lys	Lys	Ser	Leu	Leu	Thr	Lys	Ser
	450					455					460				
Ser	lle	Лlа	Th.r	Glu	Glu	Pro	Ser	Thr	Leu	Glu	Arg	Gly	Ala	Val	Phe
465					470					475					480
Ala	Ile	Asn	Phe	Ser	Pro	Ala	Leu	Arg	Glu	lle	Ile	Asn	Glu	Thr	Lys
				485					490					495	
Tyr	Leu	Glu	Gln	Leu	Gly	Phe	Thr	Val	Pro	Glu	Leu	Ala	Arg	Asn	Val
			500					505					510		
Ala	Leu	Gln	Glu	Asp	Lys	Phe	Leu	Arg	Tyr	Thr	Ala	G1 y	He	Gln	Arg
		515					520					525			
Met	Leu	Asp	His	Tyr	His	Met	Leu	lle	Gly	Thr	Leu	Asn	Asp	Ala	G1 u
	530					535					540				
Ser	Val	Leu	Leu	Lys		His	Ser	Gln	G]u		Leu	Arg	Val	Phe	
545					550					555					560
Ser	Gly	Tyr	Lys		Leu	Asn	Trp	Asn		Leu	Gly	He	Gly		Tyr
			_	565					570					575	
He	Thr	Gly		Lys	GIn	Ala	He		Lys	Phe	Glu	Ser		Val	His
0.1	7.3		580					585		C		,	590		
GIn	116		Lys	Asn	Ala	Asp		116	Ser	Ser	Arg		Inr	Leu	116
Cl.,	۸1.	595	A on	1	Dha	Lua	600	Due	A 1 a	110	1	605	C1	C1.,	C1
Glu		116	ASH	Leu	rne	Lys	1 9 1	110	мта	MIA		Sei	Giu	01u	GIU
Lou	610 Pro	Glv	Val	lvc	Glu	615 Phe	Pho	Glu	Hic	ماآ	620	Ara	Glu	Ara	Δla
625	110	Oly	vai	Lys	630	THE	THE	Olu	1113	635	Olu	A1 g	Olu	Mg	640
	Asn	Val	Asp	His		Val	Arø	Trn	Tyr		Ala	He	Glv	Pro	
501	пор	7.01	пор	645	.ne c		8		650	1300		110	0.,	655	bea
l.eu	Thr	Lvs	Val		Glv	Leu	Val	Val		Thr	Asn	Thr	Glv		Λla
		, -	660					665					670	, -	
Pro	Lys	Leu		Ser	Tyr	Tyr	Lys		Trp	Glu	Lys	Lys		Tyr	Glu
	-	675			•	-	680	-	•		-	685		-	
V.a.1	Lou	Thr	lve	Leu	He	Len	lvs	Asn	Leu	Gln	Ser	Phe	Asn	Ser	Len

	690					695					700				
He	Leu	Gly	Asn	Val	Pro	Leu	Phe	His	Thr	Glu	Thr	lle	Leu	Thr	Ala
705					710					715					720
Pro	Glu	lle	11e	Leu	His	Pro	Asn	Thr	Asn	Glu	He	Asp	Lys	Met	Cys
				725					730					735	
Phe	His	Cys	Val	Arg	Asn	Cys	Val	Glu	lle	Thr	Lys	His	Phe	Val	Arg
			740					745					750		
Trp	Met	Asn	Gly	Ser	Cys	He	Glu	Cys	Pro	Pro	Gln	Lys	Gly	Glu	Glu
		755					760					765			
Glu	Glu	Val	Val	He	Ile	Asn	Phe	Tyr	Asn	Asp	He	Ser	Leu	Asn	Pro
	770					775					780				
Gln	He	lle	Glu	Gln	Ala	Val	Met	lle	Pro	Gln	Asn	Val	His	Arg	He
785					790					795					800
Leu	lle	Asn	Leu	Met	Lys	Tyr	Leu	Gln	Lys	Trp	Lys	Arg	Tyr	Arg	Pro
				805					810					815	
Leu	Trp	Lys	Leu	Asp	Lys	Ala	lle	Val	Met	Glu	Lys	Phe	Ala	Ala	Lys
			820					825					830		
Lys	Pro	Pro	Cys	Va]	Ala	Tyr	Asp	Glu	Lys	Leu	Gln	Phe	Tyr	Ser	Lys
		835					840					845			
lle	Ala	Tyr	Glu	Val	Met	Arg	His	Pro	Leu	He	Lys	Asp	Glu	His	Cys
	850					855					860				
lle	Arg	Leu	Gln	Leu	Arg	His	Leu	Ala	Asn	Thr	Val	Gln	Glu	Asn	Ala
865					870					875					880
Lys	Ser	Trp	Val	lle	Ser	Leu	Gl y	Lys	Leu	Leu	Asn	Glu	Ser	Ala	Lys
				885					890					895	
Glu	G] u	Leu	Tyr	Asn	Leu	His	Glu	Glu	Met	Glu	Va]	Leu	Asn	Arg	Cys
			900					905					910		

<210> 3331

Val

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3331 Met Leu Leu Pro Phe 11e Arg Thr Leu Pro Leu Leu Cys Tyr Asn His 10 Leu Leu Val Ser Pro Asp Ser Ala Thr Leu Ser Pro Pro Tyr Ser Leu 25 Glu Lys Met Thr Asp Leu Val Ala Val Trp Asp Val Ala Leu Ser Asp Gly Val His Lys Ile Glu Phe Glu His Gly Thr Thr Ser Gly Lys Arg 50 55 60 Val Val Tyr Val Asp Gly Lys Glu Glu Ile Arg Lys Glu Trp Met Phe 70 75 Lys Leu Val Gly Lys Glu Thr Phe Tyr Val Gly Ala Ala Lys Thr Lys 85 90 Ala Thr Ile Asn Ile Asp Ala Ile Ser Gly Phe Ala Tyr Glu Tyr Thr 100 105 110 Leu Glu Ile Asn Gly Lys Ser Leu Lys Lys Tyr Met Glu Asp Arg Ser 120 Lys Thr Thr Asn Thr Trp Val Leu His Met Asp Gly Glu Asn Phe Arg 130 135 140 Ile Val Leu Glu Lys Asp Ala Met Asp Val Trp Cys Asn Gly Lys Lys 160 145 150 155 Leu Glu Thr Ala Val Ser 165

<210> 3332

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3332

Met Leu Trp Tyr Glu Leu Pro Gly Tyr Leu Arg Leu Pro Cys Lys Gln

1 5 10 15

Leu Trp Pro Asp Trp Val Pro Gly Arg Gly Gln Gln Thr Lys Glu Cys
20 25 30

Ser Val Gly Pro Ala Ser Ser Asp Leu Gln Asp His Pro Ala Glu Ile

35 40 45 Arg Pro Asn Ser Ser Arg Arg Ala Lys Val Ser Tyr Gly Arg Gln Leu 55 Ser Leu Glu Lys Trp Pro Ser Leu Ala Thr Leu Tyr Tyr Arg Cys Ser 65 70 Cys Thr Lys Pro Ser Gly His His Met Ser Trp Leu Ala Ala Leu Ser 90 Leu Cys Leu Ser Ser Gly Gly Cys 11e Ser Glu Arg Cys Arg Ser Ala 100 105 Ile Thr Gln Cys Ser Gln Pro Arg Met Glu Asp Leu Tyr Phe Trp Pro 115 120 125 Ser

<210> 3333

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3333

Met Pro Cys Thr Pro Pro Pro Pro Pro Pro Pro His 11e Arg Leu Ala 1 5 10 15

Ala Gly Ser Leu Glu Ala Ala Arg Leu Thr Pro Pro Arg Gly Pro Gly
20 25 30

Pro Met Ala Gly Ile Arg Ser Arg Pro Pro Ala Cys Thr Ser Glu Gln
35 40 45

Arg Gln Ala Gln Leu Ala Ala Thr His Pro Pro Leu Ala Ala Gly Arg 50 55 60

Pro Cys Ser Val Ser Trp Ser Phe Pro Arg Pro Cys Gly Pro Leu Thr
65 70 75 80

Ala Pro Leu Leu Cys Leu His Arg Ser Leu Arg Ala Leu Leu Leu Ala 85 90 95

Ser Ala Pro His Thr Ser Ala Ala Ala Trp Cys Arg Thr Leu Gly Arg 100 105 110 Tyr Pro Pro Pro 115

<210> 3334

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3334

Met Ala Asn Arg Asp Ser Ala Ser Pro His Ser Pro Pro Arg Arg Arg

1 5 10 15

Arg Cys Leu Gly Gly Pro Thr Val Leu Pro Leu Arg Lys Ile His Ala 20 25 30

Gly Cys Tyr Gly Pro Gln Pro Pro His Arg His Pro Arg Pro Leu His
35 40 45

Thr Val Ser Leu Pro Ser Pro Asn Thr Leu Leu Pro Gln Pro Gly Asp
50 55 60

Pro Trp Met Glu Asp Trp Ala Ser Gln Ser Gly Arg Gln Asp Gln Arg
65 70 75 80

Val Cys Glu His Thr Cys Val Pro Ala Asp Met Pro Gln Asp Pro Arg

85 90 95

Asp Ala Pro Ala Pro Val Thr Trp Cys Gln Ser Tyr Leu Gly Asn Trp 100 105 110

Pro Phe Trp Phe Arg Val Asn Trp Glu Val Lys Pro Leu Gly Phe Val 115 120 125

Glu Lys Arg Thr Val Arg Glu Met Leu Cys His Leu Val Arg Lys Thr 130 135 140

Phe Phe Leu Ser Ser Lys Ile Met Met Gly Phe Phe Trp Ile Cys Phe 145 150 155 160

Thr Asn Lys Ser Asp Trp Ser 11e

165

<210> 3335

<211> 343

<212	2> PI	₹T													
<213	3> Ho	omo s	sapie	ens											
<400)> 33	335													
Met	Val	Thr	Gly	Arg	Arg	Glu	Asp	Val	Ala	Thr	Ala	Arg	Arg	Glu	Пe
1				5					10					15	
He	Ser	Ala	Ala	Glu	His	Phe	Ser	Met	11e	Arg	Ala	Ser	Arg	Asn	Lys
			20					25					30		
Ser	Gly	Ala	Ala	Phe	Gly	Val	Ala	Pro	Ala	Leu	Pro	Gly	Gln	Val	Thr
		35					40					45			•
He	Arg	Val	Arg	Val	Pro	Tyr	Arg	Val	Val	Gly	Leu	Val	Val	Gly	Pro
	50					55					60				
Lys	Gly	Ala	Thr	He	Lys	Arg	11e	Gln	Gln	Gln	Thr	Asn	Thr	Tyr	He
65					70					75					80
Пе	Thr	Pro	Ser	Arg	Asp	Arg	Asp	Pro	Val	Phe	Glu	lle	Thr	Gly	Ala
				85					90					95	
Pro	Gly	Asn	Val	Glu	Arg	Ala	Arg	Glu	Glu	Ile	Glu	Thr	His	He	Ala
			100				•	105					110		
Val	Arg	Thr	Gly	Lys	Ile	Leu	Glu	Tyr	Asn	Asn	Glu	Asn	Asp	Phe	Leu
		115					120					125			
Ala	Gly	Ser	Pro	Asp	Ala	Ala	lle	Asp	Ser	Arg	Tyr	Ser	Asp	Ala	Trp
	130					135					140				
Arg	Val	His	Gln	Pro	Gly	Cys	Lys	Pro	Leu	Ser	Thr	Phe	Arg	Gln	Asr
145					150					155					160
Ser	Leu	Gly	Cys	He	Gly	Glu	Cys	Gly	Val	Asp	Ser	Gly	Phe	Glu	Ala
				165					170					175	
Pro	Arg	Leu	Gly	Glu	Gln	Gly	Gly	Asp	Phe	Gly	Tyr	Gly	Gly	Tyr	Leu
			180					185					190		
Phe	Pro	Gly	Tyr	Gly	Val	Gly	Lys	Gln	Asp	Val	Tyr	Tyr	Gly	Val	Ala
		195					200					205			

Glu Thr Ser Pro Pro Leu Trp Ala Gly Gln Glu Asn Ala Thr Pro Thr

Ser Val Leu Phe Ser Ser Ala Ser Ser Ser Ser Ser Ser Ser Ala Lys

Ala Arg Ala Gly Pro Pro Gly Ala His Arg Ser Pro Ala Thr Ser Ala

Gly Pro Glu Leu Ala Gly Leu Pro Arg Arg Pro Pro Gly Glu Pro Leu Gln Gly Phe Ser Lys Leu Gly Gly Gly Gly Leu Arg Ser Pro Gly Gly Gly Arg Asp Cys Met Val Cys Phe Glu Ser Glu Val Thr Ala Ala Leu Val Pro Cys Gly His Asn Leu Phe Cys Met Glu Cys Ala Val Arg lle Cys Glu Arg Thr Asp Pro Glu Cys Pro Val Cys His Ile Thr Ala Thr Gln Ala lle Arg Ile Phe Ser <210> 3336 <211> 125 <212> PRT <213> Homo sapiens <400> 3336 Met Asp Ala Ala Val Thr Asp Asp Phe Gln Gln Ile Leu Pro lle Glu Gln Leu Arg Ser Thr His Ala Ser Asn Asp Tyr Val Glu Arg Pro Pro

Ala Pro Cys Lys Gln Ala Leu Ser Ser Pro Ser Leu 11e Val Gln Thr His Lys Ser Asp Trp Ser Leu Ala Thr Met Pro Thr Ser Leu Pro Arg Ser Leu Ser Gln Cys His Gln Leu Gln Pro Leu Pro Gln His Leu Ser Gln Ser Ser lle Ala Ser Ser Met Ser His Ser Thr Thr Ala Ser Ser Thr Thr Ala Pro Leu Met Met Lys Thr Thr Val Leu Met Ser Pro Ala Leu Val Gly Leu Val Leu Ala Leu Ser Ala Gly Gln Pro

15

125

140

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<210> 3337
<211> 148
<212> PRT
<213> Homo sapiens
<400> 3337
Met Cys Val Tyr Thr Tyr Ile Cys Glu Tyr Arg Cys Ile Tyr Val Cys
 1
                  5
                                     10
lle Tyr lle His Val Phe Val Tyr Val Cys Tyr Ile Tyr Leu Tyr Val
Tyr Val Cys Val Ile Tyr lle His Val Cys Val Cys Val Cys Val Leu
         35
                             40
                                                 45
Tyr Ile His Val Cys Val Tyr Val Cys Val Tyr Ala Leu Arg Arg Gln
     50
                                             60
                         55
Asn Cys Pro Glu Glu Gly Trp Tyr Leu Gly Phe Pro Ser Pro Ser Leu
                     70
                                         75
Cys His Leu Val Pro Asn Arg Ala Asn Gly Pro Ser Leu Gln Thr Glu
                 85
                                     90
Ala Glu Ser Pro Gly Leu Gly Arg Gly Asp Arg Gly Thr Gly Gln Pro
                                105
Gln Trp Gly Thr Gly Asp Pro Gly Leu His Pro Asn Thr Gly Thr Arg
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120

135

Asp Arg Cys His Glu Leu Leu Leu Leu Glu Pro Ser Ala Gln Gly Ser

<210> 3338

130

145

Gly Leu Tyr Pro

<211> 172

<212> PRT

<213> Homo sapiens

115

<400> 3338

Met Asn Ala Val Gly Cys Cys Gly Leu Gln Leu Tyr Lys Phe Gly Glu 10 Thr Val Ser 11e Val Phe Trp Thr Asp Thr Trp Arg Pro Glu Ser Phe 20 25 30 Phe Asp Lys Val Lys Lys Asn Arg Gln Asn Gly Met His Thr Leu Cys 40 45 Leu Leu Asp Ile Lys Val Lys Glu Gln Ser Leu Glu Asn Leu Ile Lys 55 60 Gly Arg Lys Ile Tyr Glu Pro Pro Arg Tyr Met Ser Val Asn Gln Ala 65 Ala Gln Gln Leu Leu Glu Ile Val Gln Asn Gln Arg Ile Arg Gly Glu 90 Glu Pro Ala Val Thr Glu Glu Thr Leu Cys Val Gly Leu Ala Arg Val 100 105 110 Gly Ala Asp Asp Gln Lys Ile Ala Ala Gly Thr Leu Arg Gln Met Cys 115 120 125 Thr Val Asp Leu Gly Glu Pro Leu His Ser Leu 11e Ile Thr Gly Gly 135 140 Ser lle His Pro Met Glu Met Glu Met Leu Ser Leu Phe Ser Ile Pro 145 150 155 160 Glu Asn Ser Ser Glu Ser Gln Ser Ile Asn Gly Leu 165 170

<210> 3339

⟨211⟩ 135

<212> PRT

<213> Homo sapiens

<400> 3339

 Met His Leu Thr Ser Pro Pro Val Leu Arg Thr Pro Cys Cys Ser Gly

 1
 5
 10
 15

 His Arg Val Ser Gln Gln Trp His 11e Asp Thr Trp Ala Arg Glu Phe
 20
 25
 30

 Phe Ala Ala Gly Gly Gly Gly Gly Gly Pro Val Cys Cys Arg Leu Leu Cys
 45

Gly Ser Phe Ser Leu Cys Pro Leu Ile Glu Ala Pro Leu Pro Trp Leu Gln Pro Lys Met Ser Pro Asp Ile Ala Lys Cys Pro Gly Ala Gly Ala Arg Gly Thr Met Ser Pro Leu Thr His Leu Glu Asn His Cys Tyr Lys Arg Thr Gly Thr Ala Lys Glu Ala lle Ile Ser Arg Lys Ser Cys Cys Arg Phe Ser Leu Asn Lys Gly Val Ser Ile Leu Arg Asn Pro Pro Lys Asp Cys Trp Pro Ser Leu Ser <210> 3340 <211> 477 <212> PRT <213> Homo sapiens <400> 3340 Met Phe Ser lle Thr Leu lle Asn Ilis Phe Asp Leu Ser Ile Leu lle Thr Thr Met Val Leu Val Pro Ser Tyr Thr Leu Leu Gly Phe Lys Thr Phe Leu Glu Val Arg Asp Gln Glu His Tyr Arg Glu Phe Pro Glu Ala Asn Phe Glu Leu Ser Ala Thr Asp Phe Leu Val Cys Phe Ile Pro Tyr Phe Gln Thr Leu Leu Phe Val Phe Val Leu Arg Cys Met Glu Leu Lys Cys Gly Lys Lys Arg Met Arg Lys Asp Pro Val Phe Arg lle Ser Pro Gln Ser Arg Asp Ala Lys Pro Asn Pro Glu Glu Pro lle Asp Glu Asp

Glu Asp lle Gln Thr Glu Arg lle Arg Thr Ala Thr Ala Leu Thr Thr

Ser	He	Leu	Asp	Glu	Lys	Pro	Val	Пe	He	Ala	Ser	Cys	Leu	His	Lys
	130					135					140				
Glu	Tyr	Ala	Gly	Gln	Lys	Lys	Ser	Cys	Phe	Ser	Lys	Arg	Lys	Lys	Lys
145					150					155					160
He	Ala	Ala	Arg	Asn	Пе	Ser	Phe	Cys	Val	GIn	Glu	Gly	Glu	Пe	Leu
				165					170					175	
Gly	Leu	Leu	Gly	Pro	Asn	Gly	Ala	Gly	Lys	Ser	Ser	Ser	11e	Arg	Met
			180					185					190		
Ile	Ser	Gly	He	Thr	Lys	Pro	Thr	Ala	Gly	Glu	Val	Glu	Leu	Lys	Gly
		195					200					205			
Cys	Ser	Ser	Val	Leu	Gly	His	Leu	Gly	Tyr	Cys	Pro	Gln	Glu	Asn	Val
	210					215					220				
Leu	Trp	Pro	Met	Leu	Thr	Leu	Arg	Glu	His	Leu	Glu	Val	Tyr	Ala	Ala
225					230					235					240
Val	Lys	Gly	Leu	Arg	Lys	Ala	Asp	Ala	Arg	l.eu	Ala	He	Ala	Arg	Leu
				245					250					255	
Val	Ser	Ala	Phe	Lys	Leu	His	Glu	Gln	Leu	Asn	Val	Pro	Val	Gln	Lys
			260					265					270		
Leu	Thr	Ala	Gly	lle	Thr	Arg	Lys	Leu	Cys	Phe	Val	Leu	Ser	Leu	Leu
		275					280					285			
Gly	Asn	Ser	Pro	Val	Leu	Leu	Leu	Asp	Glu	Pro	Ser	Thr	Gly	lle	Asp
	290					295					300				
Pro	Thr	Gly	Gln	Gln	Gln	Met	Trp	Gln	Ala	Пe	Gln	Ala	Va]	Val	Lys
305					310					315					320
Asn	Thr	G]u	Arg		Va]	Leu	Leu	Thr		llis	Asn	Leu	Ala		Ala
				325					330					335	
Glu	Ala	Leu		Asp	Arg	Val	Ala		Met	Val	Ser	Gly		Leu	Arg
	12		340					345					350		
Cys	lle		Ser	He	GIn	His		Lys	Asn	Lys	Leu		Lys	Asp	Tyr
		355					360		_			365			
He		Glu	Leu	Lys	Val	Lys	Glu	Thir	Ser	GIn		Thr	Leu	Val	His
	370				_	375					380	0.	0.		
	Glu	He	Leu	Lys		Phe	Pro	Gln	Ala		Gly	GIn	Glu	Arg	
385					390					395	. =				400
Ser	Ser	Leu	Leu	Thr	Tyr	Lys	Leu	Pro	Val	Ala	Asp	Va.	Tyr	Pro	Leu

<211> 181

<212> PRT

<213> Homo sapiens

100

<400> 3341 Met Gly Asn Pro Ile Leu Gln Gln His Tyr lle Arg Glu Ala Thr Met 5 10 15 Glu Gln Gly Thr Arg Pro Lys Lys Pro Pro Cys Ala Tyr Ser Thr Val 20 25 His Arg Val Pro Ser Ala Pro Glu Gly Pro Cys Pro Pro Thr Ser Thr 40 45 Ala Pro Ser Ser Gly Pro Pro Arg Ala Leu Gly Arg Phe Leu Cys Gln 50 55 Thr Ser Pro Ala Thr His Ser Ser Gly Ser Arg Ala Pro Pro Pro Gln 70 75 Gln Gln Ser Ser Arg Asp Leu Pro Gln Gly Arg Ser Pro Ala Pro Gly 85 90 Trp Lys Ala Ala Glu Leu Trp Arg Gly Thr Gln Arg Thr Ala Gly

Arg Ala Cys Pro Arg Leu Pro Ala Arg Pro Glu Gly Ser Ala Arg Ser 115 120 125

105

110

Lys Asn Gln Lys Ser Ser Met Arg Ser Pro Ala Gly Arg Arg Gly Val 130 135 140

Ala Gln Pro Val Leu Ile Leu Ser Trp Arg Lys Pro Ser Gly Arg Val

150 155 Leu Gly Arg Thr Arg Leu Pro Pro Arg Leu Leu Ser Ala Ala Cys Pro 170 Ala Arg Thr Ser Val 180 <210> 3342 <211> 117 <212> PRT <213> Homo sapiens <400> 3342 Met Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser 1 10 15 Ser Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met 25 Ser His Cys Ala Trp Thr Ile Phe Thr Phe Phe Glu Thr Glu Ser 35 40 45 Cys Ser Val Thr Gln Thr Glu Val Gln Trp Arg Arg Leu Gly Ser Leu 55 60 Gln Ala Pro Leu Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu Pro 75

Asn Ser Trp Asp Tyr Arg Arg Pro Pro Pro Phe Leu Ala Asn Phe Phe

Val Phe Leu Val Ala Met Gly Phe His His Val Ser Gln Asp Gly Leu

105

90

110

Asp Ile Leu Thr Ser

100

115

<210> 3343

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3343

Met Cys His His Ala Trp Leu Ile Phe Ile Phe Leu Val Glu Thr Gly 10 Phe His His Val Val Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp 30 20 25 Leu Pro Thr Ser Ala Ser Gln Gly Ala Gly lle Thr Gly Met Ser His 40 45 His Ala Trp Pro Phe Leu Thr Leu Leu Tyr Asp Met Pro Ile Ala Ser 50 55 60 Leu Arg Ala Ser Val Pro Cys Tyr Phe Thr Leu Gly Phe Arg Trp Arg 70 75 Glu Gln Leu Leu Phe Gly Thr Leu Ala lle Ala Trp Gln Met Gly lle

Cys His Phe Cys Ser Tyr Leu Val Gly Ser Thr lle Thr Phe Arg Ala 100 105 110

90

85

Asn Pro Ala Ala Lys Pro Gly Ile Asn Arg Ala Glu Lys Tyr 1le Leu 115 120 125

<210> 3344

<211> 752

<212> PRT

<213> Homo sapiens

<400> 3344

Met Glu Thr Val Val Ala Gly Gly Ser Gly Gly Asp Gly Glu Glu Glu
1 5 10 15

Glu Glu Ala Leu Pro Glu Gln Ser Glu Gly Lys Glu Gln Lys 11e Leu 20 25 30

Leu Asp Thr Ala Cys Lys Met Val Arg Trp Leu Ser Ala Lys Leu Gly
35 40 45

Pro Thr Val Ala Ser Arg His Val Ala Arg Asn Leu Leu Arg Leu Leu 50 55 60

Thr Ser Cys Tyr Val Gly Pro Thr Arg Gln Gln Phe Thr Val Ser Ser 65 70 75 80

Gly Glu Ser Pro Pro Leu Ser Ala Gly Asn Ile Tyr Gln Lys Arg Pro

				85					90					95	
Val	Leu	Gly	Asp	He	Val	Ser	Gly	Pro	Val	Leu	Ser	Cys	Leu	Leu	His
			100					105					110		
He	Ala	Arg	Leu	Tyr	Gly	Glu	Pro	Val	Leu	Thr	Tyr	Gln	Tyr	Leu	Pro
		115					120					125			
Tyr	He	Ser	Tyr	Leu	Val	Ala	Pro	Gly	Ser	Ala	Ser	Gly	Pro	Ser	Arg
	130					135					140				
Leu	Asn	Ser	Arg	Lys	Glu	Ala	Gly	Leu	Leu	Ala	Ala	Va]	Thr	Leu	Thr
145					150					155					160
Gln	Lys	He	lle	Val	Tyr	Leu	Ser	Asp	Thr	Thr	Leu	Met	Asp	He	Leu
				165					170					175	
Pro	Arg	He	Ser	His	Glu	Val	Leu	Leu	Pro	Val	Leu	Ser	Phe	Leu	Thr
			180					185					190		
Ser	Leu		Thr	Gly	Phe	Pro	Ser	Gly	Ala	Gln	Ala	Arg	Thr	He	Leu
		195					200					205			
Cys		Lys	Thr	Ile	Ser		He	Ala	Leu	He		Leu	Arg	lle	Gly
	210					215		_			220			-	
	Glu	Met.	Val	GIn		His	Leu	Ser	Glu		Val	Ala	Thr	Phe	
225	., .	151		0.1	230		.			235	0.1				240
GIn	Val	Phe	Ser		Leu	HIS	Glu	Leu		61n	61n	Asp	Leu		Leu
A	Dana	110	C1	245	C1	C1	C1	C1	250	Dua	Clo	V o 1	Vol	255	Con
ASP	FFO	мта	260	Arg	Gly	Gru	Gry		Leu	110	GIII	V 21	Val 270	rne	261
Acn	Clv	Cln		Λικα	Dro	Vo.1	Acn	265 Pro	Alo	Lou	Lou	Acn	Glu	Lou	Gla
nsp	Oly	275	OIII	nı g	110	vai	280	110	MIG	Leu	Leu	285	014	Leu	Om
Lvs	Val		Thr	Leu	Glu	Met		Tvr	Thr	Tle	Tvr		Pro	Phe	Ser
2,0	290			200	014	295					300				501
Cys	Leu	Leu	Gly	Asp	Ile	lle	Arg	Lvs	11e	lle	Pro	Asn	His	Glu	Leu
305			·	•	310			•		315					320
Val	Gly	Glu	Leu	Ala	Ala	Leu	Tyr	Leu	Glu	Ser	He	Ser	Pro	Ser	Ser
				325					330					335	
Arg	Asn	Pro	Ala	Ser	Val	Glu	Pro	Thr	Met	Pro	Gly	Thr	Gly	Pro	Glu
			340					345					350		
Trp	Asp	Pro	His	Gly	Gly	Gly	Cys	Pro	Gln	Asp	Asp	Gly	His	Ser	Gly
		355					360					365			
Thr	Phe	Glv	Ser	Val	Leu	Val	Glv	Asn	Arg	He	Gln	He	Pro	Asn	Glv

	370					375					380				
Ser	Arg	Pro	Glu	Asn	Pro	Gly	Pro	Leu	Gly	Pro	He	Ser	Gly	Val	Gly
385					390					395					400
Gly	Gly	Gly	Leu	Gly	Ser	Gly	Ser	Asp	Asp	Asn	Λla	Leu	Lys	Gln	Glu
				405					410					415	
Leu	Pro	Arg	Ser	Val	His	Gly	Leu	Ser	G1 y	Asn	Trp	Leu	Λla	Tyr	Trp
			420					425					430		
G1n	Tyr	Glu	lle	Gly	Val	Ser	Gln	Gln	Asp	Ala	His	Phe	His	Phe	His
		435					440					445			
Gln	lle	Arg	Leu	Gln	Ser	Phe	Pro	Gly	His	Ser	Gly	Ala	Val	Lys	Cys
	450					455					460				
Val	Λla	Pro	Leu	Ser	Ser	Glu	Asp	Phe	Phe	Leu	Ser	G1 y	Ser	Lys	Asp
465					470					475					480
Arg	Thr	Val	Arg	Leu	Trp	Pro	Leu	Tyr	Asn	Tyr	Gly	Asp	Gly	Thr	Ser
				485					490					495	
Glu	Thr	Ala	Pro	Arg	Leu	Val	Tyr	Thr	Gln	His	Arg	Lys	Ser	Va]	Phe
			500					505	•				510		
Phe	Val	Gly	Gln	Leu	Glu	Ala	Pro	Gln	His	Val	Val	Ser	Cys	Asp	Gly
		515					520					525			
Ala	Val	His	Val	Trp	Asp	Pro	Phe	Thr	Gly	Lys	Thr	Leu	Arg	Thr	Val
	530					535					540				
Glu	Pro	Leu	Asp	Ser	Arg	Val	Pro	Leu	Thr	Ala	Val	Ala	Val	Met	Pro
545					550					555					560
Ala	Pro	His	Thr	Ser	He	Thr	Met	Ala	Ser	Ser	Asp	Ser	Thr	Leu	Arg
				565					570					575	
Phe	Va]	Asp	Cys	Arg	Lys	Pro	Gly	Leu	Gln	His	Glu	Phe	Arg	Leu	Gly
			580					585					590		
Gly	Gly	Leu	Asn	Pro	Gly	Leu	Val	Arg	Ala	Leu	Ala	lle	Ser	Pro	Ser
		595					600					605			
Gly	Arg	Ser	Val	Val	Ala	Gly	Phe	Ser	Ser	Gly	Phe	Met	Val	Leu	Leu
	610					615					620				
Asp	Thr	Arg	Thr	Gly	Leu	Val	Leu	Arg	Gly	Trp	Pro	Ala	His	Glu	Gly
625					630					635					640
Asp	He	Leu	Gln	lle	Lys	Ala	Val	Glu	Gly	Ser	Val	Leu	Val	Ser	Ser
				645					650					655	
Ser	Ser	Asp	His	Ser	Leu	Thr	Val	Trp	Lys	G1u	Leu	G1u	Gln	Lys	Pro

Thr His His Tyr Lys Ser Ala Ser Asp Pro Ile His Thr Phe Asp Leu Tyr Gly Ser Glu Val Val Thr Gly Thr Val Ser Asn Lys 11e Gly Val Cys Ser Leu Leu Glu Pro Pro Ser Gln Ala Thr Thr Lys Leu Ser Ser Glu Asn Phe Arg Gly Thr Leu Thr Ser Leu Ala Leu Leu Pro Thr Lys Arg His Leu Leu Gly Ser Asp Asn Gly Val Ile Arg Leu Leu Ala <210> 3345 <211> 805 <212> PRT <213> Homo sapiens <400> 3345 Met Ala Arg Leu His Glu His Leu Lys Tyr Phe Val Asn Met Lys Ile

Ser Thr Asp Lys Ser Trp Gln Gly Val Thr Ile Tyr Phe Ser Gly His Glu Thr Pro Gly Glu Gly Glu His Lys Ile Met Glu Phe lle Arg Ser Glu Lys Ala Lys Pro Asp His Asp Pro Asn Thr Arg His Cys Leu Tyr Gly Leu Asp Ala Asp Leu Ile Met Leu Gly Leu Thr Ser His Glu Ala His Phe Ser Leu Leu Arg Glu Glu Val Arg Phe Gly Gly Lys Lys Thr Gln Arg Val Cys Ala Pro Glu Glu Thr Thr Phe His Leu Leu His Leu Ser Leu Met Arg Glu Tyr Ile Asp Tyr Glu Phe Ser Val Leu Lys Glu

Lys	Пе	Thr	Phe	Lys	Tyr	Λsp	lle	Glu	Arg	lle	lle	Asp	Asp	Trp	lle
	130					135					140				
Leu	Met	Gly	Phe	Leu	Va]	Gly	Asn	Asp	Phe	He	Pro	His	Leu	Pro	His
145					150					155					160
Leu	His	He	Asn	His	Asp	Ala	Leu	Pro	Leu	Leu	Tyr	Gly	Thr	Tyr	Val
				165					170					175	
Thr	He	Leu	Pro	61u	Leu	Gly	Gly	Tyr	Пe	Asn	Glu	Ser	Gly	His	Leu
			180					185					190		
Asn	Leu	Pro	Arg	Phe	Glu	Lys	Tyr	Leu	Val	Lys	Leu	Ser	Asp	Phe	Asp
		195					200					205			
Arg	Glu	His	Phe	Ser	Glu	Val	Phe	Val	Asp	Leu	Lys	Trp	Phe	Glu	Ser
	210					215					220				
Lys	Val	Gly	Asn	Lys	Tyr	Leu	Asn	Glu	Ala	Ala	Gly	Val	Ala	Ala	Glu
225					230					235					240
Glu	Ala	Arg	Asn	Tyr	Lys	Glu	Lys	Lys	Lys	Leu	Lys	Gly	Gln	Glu	Asn
				245					250					255	
Ser	Leu	Cys	Trp	Thr	Ala	Leu	Asp	Lys	Asn	Glu	Gly	Glu	Met	lle	Thr
			260					265					270		
Ser	Lys	Asp	Asn	Leu	Glu	Asp	Glu	Thr	Glu	Asp	Asp	Asp	Leu	Phe	Glu
		275					280					285			
Thr	Glu	Phe	Arg	Gln	Tyr	Lys	Arg	Thr	Tyr	Tyr	Met	Thr	Lys	Met	Gly
	290					295					300				
Val	Asp	Va]	Val	Ser	Asp	Asp	Phe	Leu	Ala	Asp	G] n	Ala	Ala	Cys	Tyr
305					310					315					320
Val	Gln	Ala	11e	Gln	Trp	He	Leu	His	Tyr	Tyr	Tyr	His	Gly	Val	Gln
				325					330					335	
Ser	Trp	Ser	Trp	Tyr	Tyr	Pro	Tyr	His	Tyr	Ala	Pro	Phe	Ĺeu	Ser	Asp
			340					345					350		
He	His	Asn	He	Ser	Thr	Leu	Lys	He	His	Phe	Glu	Leu	Gly	Lys	Pro
		355					360					365			
Phe	Lys	Pro	Phe	Glu	Gln	Leu	Leu	Ala	Val	Leu	Pro	Ala	Ala	Ser	Lys
	370					375					380				
	Leu	Leu	Pro	Ala	Cys	Tyr	Gln	His	Leu	Met	Thr	Asn	Glu	Asp	Ser
385					390					395					400
Pro	He	He	Glu	Tyr	Tyr	Pro	Pro	Asp	Phe	Lys	Thr	Asp	Leu	Asn	Gly
				405					410					415	

Lys	Gln	Gln	Glu	Trp	Glu	Ala	Val	Val	Leu	He	Pro	Phe	lle	Asp	Glu
			420					425					430		
Lys	Arg	Leu	Leu	Glu	Ala	Met	Glu	Thr	Cys	Asn	His	Ser	Leu	Lys	Lys
		435					440					445			
Glu	Glu	Arg	Lys	Arg	Asn	Gln	His	Ser	Glu	Cys	Leu	Met	Cys	Trp	Tyr
	450					455					460				
Asp	Arg	Asp	Thr	Glu	Phe	He	Tyr	Pro	Ser	Pro	Trp	Pro	Glu	Lys	Phe
465					470					475					480
Pro	Ala	He	Glu	Arg	Cys	Cys	Thr	Arg	Tyr	Lys	lle	Ile	Ser	Leu	Asp
				485					490					495	
Ala	Trp	Arg		Asp	He	Asn	Lys		Lys	He	Thr	Arg		Asp	Gln
			500					505					510		
Lys	Ala		Tyr	Phe	Cys	Gly		Pro	Thr	Leu	Lys		He	Arg	His
	DI	515				0	520	., ,	0.1		DI	525	0.1	0	
Lys		Phe	Leu	Lys	Lys	Ser	61 y	Val	GIn	Val		GIn	GIn	Ser	Ser
A 22.00	530	C1	Aan	Mot	Mot	535	C1	II.	Lou	Vol	540	۸۱.	C1	Con	A an
545	Gly	Glu	ASII	Met.	550	Leu	Giu	116	Leu	555	vsb	мта	Giu	Sei	560
	Leu	Thr	Val	Glu		Val	Ala	Ser	Ser		Leu	Glv	lvs	Ser	
014	LCu			565	71.511	,	,,,,,,	001	570	, aı	Lea	01)	L, S	575	101
Phe	Val	Asn	Trp		His	Leu	Glu	Glu		Arg	Val	Val	Ala		Ser
			580					585		Ü			590		
Asp	Gly	Glu	Thr	Lys	Phe	Tyr	Leu	Glu	Glu	Pro	Pro	Gly	Thr	Gln	Lys
		595					600					605			
Leu	Tyr	Ser	Gly	Arg	Thr	Ala	Pro	Pro	Ser	Lys	Val	Val	His	Leu	Gly
	610					615					620				
Asp	Lys	Glu	Gln	Ser	Asn	Trp	Ala	Lys	Glu	Val	Gln	Gly	Пе	Ser	Glu
625					630					635					640
His	Tyr	Leu	Arg	Arg	Lys	Gly	He	11e	He	Asn	Glu	Thr	Ser	Ala	Val
				645					650					655	
Val	Tyr	Ala	Gln	Leu	Leu	Thr	G1y	Arg	Lys	Tyr	G1n	lle	Asn	Gln	Asn
			660					665					670		
Gly	Glu	Val	Arg	Leu	Glu	Lys	Gln	Trp	Ser	Lys	Gln	Va]	Val	Pro	Phe
		675					680					685			
Val		Gln	Thr	He	Val	Lys	Asp	He	Arg	Ala		Asp	Ser	Arg	Phe
	690					695					700				

Ser Asn Ile Lys Thr Leu Asp Asp Leu Phe Pro Leu Arg Ser Met Val Phe Met Leu Gly Thr Pro Tyr Tyr Gly Cys Thr Gly Glu Val Gln Asp 730 735 Ser Gly Asp Val lle Thr Glu Gly Arg Ile Arg Val Ile Phe Ser lle 750 740 745 Pro Cys Glu Pro Asn Leu Asp Ala Leu 11e Gln Asn Gln His Lys Tyr 760 765 Ser Ile Lys Tyr Asn Pro Gly Tyr Val Leu Ala Ser Arg Leu Gly Val 770 775 780 Ser Gly Tyr Leu Val Ser Arg Phe Thr Gly Ser Ile Phe Ile Gly Arg 790 795 800 785 Gly Ser Arg Arg Lys 805

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Lys Ser Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Cys Asp Pro 20 25 30

Gly Ser Leu Gln Pro Leu Pro Pro Gly Leu Lys Arg Phe Ser Cys Leu
35 40 45

Ser Leu Leu Ser Ser Trp Asp Tyr Arg Arg Ile Pro Trp Glu His Pro 50 55 60

Pro Ala Glu lle Cys Thr Ser Ala Thr lle Leu Ser Gly Arg Arg Lys
65 70 75 80

Gly Lys Gly Ser Ala Ala Ser Leu Ala Thr Ala Cys lle lle Ser Ser 85 90 95

Gln Arg Arg Ser Thr Gly Ser Gly Ser Phe Arg Ala 100 105

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Met Pro Val Ile Pro Ala Thr Arg Glu Ala Glu Ala Arg Glu Ser Leu
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 1
                                     10
                                                          15
Asp Ser Lys His Ser Phe Ile His Ile Pro Ile His Pro Tyr Thr Tyr
Ser Ser Asn Ser Cys Ser Ser Lys His Pro Ser 11e His Pro Ser 11e
                             40
                                                  45
His Pro Ser Ile His Pro Ser Ile Tyr Thr Ser Ile Tyr Pro Phe Met
     50
                         55
                                              60
His Leu Tyr 11e Tyr Leu Leu 11e Lys Phe Leu Ser 11e His Pro Ser
                     70
                                         75
Thr Tyr Leu Ser Asn Phe Cys Ser Ser Lys His Pro Pro Ile His Leu
                 85
                                     90
Ser Thr His Pro Ser 11e His Ala Cys Met His Pro Ser 11e His Thr
                                 105
Tyr Ile His Ser Leu Ile Arg Leu Tyr Thr His Pro Ser Met Tyr Leu
                                                 125
                            120
Phe 11e
    130
<210> 3348
<211> 153
<212> PRT
<213> Homo sapiens
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Met Ser Lys Leu Ala Val Leu Thr Arg Thr Leu Glu Gly Met Ala Met

10

15

5

<400> 3348

1.

Glu His Arg Leu Glu Met Val Arg Phe Ile Phe Thr Ser Pro Ala Pro 25 Leu Asp Lys Val Leu Gly Met Val Arg Ala Tyr Lys Glu Thr Gln Thr 35 40 45 Ala lle Asn lle Ser Leu Tyr Asp Ala Met Pro Trp Arg Pro Asn Pro 55 60 Pro Leu Leu Phe Phe Phe Phe Leu Thr Gly Ser His Phe Val Thr 70 75 Gln Ala Gly Val Glu Trp Gly Asp Leu Gly Ser Leu Gln Pro Pro Gln 85 90 Pro Pro Gly Leu Lys Pro Ser Ser Cys Leu Ser Pro Pro Ser Ser Trp 105 Asp Tyr Arg His Ala Pro Ser Cys Leu Ala Ser Phe Phe Phe Phe 115 125 120 Glu Thr Glu Ser Cys Ser Leu Pro Gln Ala Arg Val Gln Trp His Asp 130 135 140 Leu Gly Ser Leu Gln Ala Pro Pro Pro 145 150

<210> 3349

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3349

Met Glu lle Asp Gly Phe Gln Gln Leu Asp Leu Glu Lys Ser Val Pro 1 5 10 15

Ser Lys Lys Thr Thr Pro Lys Arg 11e His Phe Val Asp Gly Asp 20 25 30

The Met Glu Glu Tyr Ser Thr Glu Glu Glu Glu Glu Glu Glu Lys Glu
35 40 45

Glu Gln Ser Thr Asn Ser Thr Leu Asp Pro Ser Lys Leu Ser Trp Gly
50 55 60

Pro Tyr Leu Arg Phe Trp Ala Gly Arg Ile Ala Ser Thr Ser Phe Ser 65 70 75 80

<210> 3350

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<213> Homo sapiens

<400> 3350

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Pro Ala Phe Trp Glu Ala Gly Val Gly Gly Leu Leu Glu Ala Arg Tyr 35 40 45

Ser Arg Pro Ala Trp Gln Pro Gly Glu lle Pro Cys lle Gln Lys Ile 50 55 60

Glu Lys Leu Ala Arg Asp Asp Gly Val Arg Leu Trp Ser Gln Leu Leu 65 70 75 80

Gly Arg Leu Arg Trp Glu Asp Cys Leu Ser Leu Gly Gly Arg Gly Cys
85 90 95

Ser Glu Trp Arg Leu Arg His Trp Thr Pro Ala Trp Ala Thr Val Arg 100 105 110

Pro Cys Leu Lys Lys Leu 11e Met 115 120

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$\langle 213 \rangle$ Homo sapiens

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l				5					10					15	
Met	Lys	Val	Ser	Glu	Lys	Ser	His	Asn	Ala	Phe	Lys	Ala	Thr	Asn	Lys
			20					25					30		
Lys	Arg	Glu	Thr	Asp	Va]	His	Leu	Lys	Ser	Gln	Asp	Phe	Leu	Met	Lys
		35					40					45			
Thr	Asn	Thr	Ser	Thr	Gly	Leu	Lys	Met	Ala	Met	Glu	Arg	Ser	Leu	Asn
	50					55					60				
Pro	Пе	Asn	Phe	Asn	Pro	Glu	Asn	Asn	Val	Lys	Glu	Ser	Glu	Cys	Pro
65					70					75					80
Leu	Pro	Pro	Pro	Ser	Pro	Pro	Pro	Pro	Pro	Pro	Ser	Asn	Ala	Ser	Ser
				85					90					95	
Glu	lle	Glu	Phe	Pro	Leu	Pro	Pro	Pro	Pro	Pro	Leu	Met	Met	Phe	Pro
			100					105					110		
Glu	Lys	Asn	Gly	Phe	Leu	Pro	Ser	Leu	Ser	Thr	Glu	Lys	He	Lys	Ala
		115					120					125			
Glu	Phe	Glu	Ser	Phe	Pro	Gly	Leu	Pro	Leu	Pro	Pro	Pro	Pro	Val	Asp
	130					135					140				
Glu	Lys	Ser	Glu	Arg	Glu	Ser	Ser	Ser	Met	Phe	Leu	Pro	Pro	Pro	Pro
145					150					155					160
Pro	Pro	Thr	Pro	Ser	Gln	Lys	Pro	Ala	llis	Leu	Leu	Ser	Ser	Ser	Ala
				165					170					175	
Pro	Glu	Lys	His	Ser	Gly	Asp	Phe	Met	Gln	Gln	Tyr	Ser	Gln	Lys	Glu
			180					185					190		
Ala	Ser	Asn	Ser	GIn	Asn	Ser	Gln	Ala	Lys	He	He	Thr	Gly	Lys	Thr
		195					200					205			
Gly	Val	Leu	Pro	Pro	Pro	Thr	l.eu	Pro	Lys	Pro	Lys	Leu	Pro	Lys	His
	210					215					220				
He	Lys	Asp	Asn	Lys	Asn	Asp	Phe	Ser	Pro	Lys	Val	Glu	Leu	Ala	Thr
225					230					235					240
Ser	Leu	Ser	Asp	Met	Glu	Cys	Lys	He		Thr	Ser	Lys	Asp		Lys
				245					250					255	
Lvs	Va]	Met	Val	Met	Thr	Ser	Ser	Glu	His	Thr	Glu	Thr	Lys	Gln	Asn

			260					265					270		
Val	He	Ser	Lys	Ser	Leu	Asp	Glu	Arg	Lys	Gln	Leu	Ser	Пе	Asp	Ser
		275					280					285			
Ala	Asn	Cys	Leu	Ser	His	Thr	Val	Pro	Gly	Thr	Ser	Ala	Pro	Arg	Lys
	290					295					300				
Lys	Gln	He	Ala	Pro	Leu	He	Lys	Ser	His	Ser	Phe	Pro	Glu	Ser	Ser
305					310					315					320
Gly	Gln	Gln	Asn	Pro	Lys	Pro	Tyr	Met	Arg	Lys	Phe	Lys	Thr	Pro	Leu
				325					330					335	
Met	He	Ala	Glu	Glu	Lys	Tyr	Arg	Gln	Gln	Lys	Glu	Glu	He	Glu	Lys
			340					345					350		
Gln	Lys	Gln	Glu	Ser	Ser	Tyr	Tyr	Asn	He	Va]	Lys	Thr	Gln	Ser	Gln
		355					360					365			
Asn	Gln	His	He	Thr	Glu	Val	Glu	Lys	Glu	Me t	Pro	Leu	Gln	Lys	Thr
	370					375					380				
Asn	Glu	Glu	Val	Ser	Leu	Ser	Gly	He	Asp	Ser	Glu	Cys	Thr	Val	Val
385					390					395					400
Gln	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Asn	Ala	Arg	He	Leu	Gly	Val	Cys
				405					410					415	
Ser	Asp	Asn	Gln	Leu	Ser	Thr	Thr	Ser	Pro	Glu	Thr	Val	Ala	Ala	Lys
			420					425					430		
Arg	Leu	His	His	Val	Leu	Λla	Ala	Ser	G]u	Asp	Lys	Asp	Lys	Met	Lys
		435					440					445			
Lys	Glu	Val	Leu	Gln	Ser	Ser	Arg	Asp	He	Met	Gln	Ser	Lys	Ser	Ala
	450					455					460				
Cys	Glu	11e	Lys	Gln	Ser	His	G1n	Glu	Cys	Ser	Thr	Gln	Gln	Thr	Gln
465					470					475					480
Gln	Lys	Lys	Tyr	Leu	Glu	Gln	Leu	His	Leu	Pro	Gln	Ser	Lys	Pro	He
				485					490					495	
Ser	Pro	Asn	Phe	Lys	Val	Lys	Thr	Пe	Lys	Leu	Pro	Thr	Leu	Asp	His
			500					505					510		
Thr	Leu	Asn	Glu	Thr	Asp	His	Ser	Tyr	Glu	Ser	His	Lys	Gln	Gln	Ser
		515					520					525			
Glu	He	Asp	Val	Gln	Thr	Phe	Thr	Lys	Lys	GIn	Tyr	Leu	Lys	Thr	Lys
	530					535					540				
Lvs	Thr	Glu	Ala	Ser	Thr	Glu	Cvs	Ser	His	Lvs	Gln	Ser	Leu	Ala	Glu

545					550					555					560
Arg	His	Tyr	Gln	Leu	Pro	Lys	Lys	Glu	Lys	Arg	Val	Thr	Val	Gln	Leu
				565					570					575	
Pro	Thr	Glu	Ser	Пe	Gln	Lys	Asn	Gln	Glu	Asp	Lys	Leu	Lys	Met	Val
			580					585					590		
Pro	Arg	Lys	Gln	Arg	Glu	Phe	Ser	Gly	Ser	Asp	Arg	Gly	Lvs	Leu	Pro
	_	595					600	-				605	-		
Glv	Ser		Glu	Lvs	Asn	Gln		Pro	Ser	Met	He		۸rg	Lvs	Glu
,	610			22,7		615	,				620	* ** 2	6		
Glu		Len	lle	Thr	Glu	Arg	Lvs	His	Glu	His		lvs	Asn	lvs	Ser
625	111 8	Bea	.10		630	711 6	E, S	1115	O T G	635	Doa	2,5	11011	LJO	640
	Pro	lve	Val	Val		Gln	Lve	Val	Ha		Als	Hie	Lau	Aen	
Ma	110	rys	101	645	Lys	OIH	Lyo	101	650	17.5 P	2110	1113	Leu	655	501
Cln.	Thu	Cln	dan		Cln	G1n	The	Cln		Cln	Than	Ala	C1		Lve
0111	1111	OIII		1116	OIII	0111	1111		116	OIII	1111	MIO	670	361	Lys
A 1 -	C1	11: -	660	1	1	D	C1	665	Т	A	C	1		C1	C1
ита	GIU		LyS	Lys	Leu	Pro		rro	1 y 1	ASII	261		GIH	Glu	Giu
	C	675	C1	V 1		C1	680	C1	C1	,	C1	685	DI	C	
Lys	Cys	Leu	Glu	val	Lys	Gly	He	GIn	G1u	Lys	GIn	val	Phe	Ser	Asn
	000					205					500				
m.	690					695		T	0.1		700	0	Di	121	6
		Asp	Ser	Lys		695 Glu	Ile	Thr	G1n			Ser	Phe	Phe	
705	Lys				710	Glu				715	Lys				720
705	Lys			Ser	710				Gly	715	Lys			Asn	720
705 Ser	Lys Val	Lys	Glu	Ser 725	710 Gln	Glu Arg	Asp	Asp	Gly 730	715 Lys	Lys Gly	Ala	Leu	Asn 735	720 11e
705 Ser	Lys Val	Lys	Glu	Ser 725	710 Gln	Glu	Asp	Asp	Gly 730	715 Lys	Lys Gly	Ala	Leu	Asn 735	720 11e
705 Ser	Lys Val	Lys	Glu	Ser 725	710 Gln	Glu Arg	Asp	Asp	Gly 730	715 Lys	Lys Gly	Ala	Leu	Asn 735	720 11e
705 Ser Val	Lys Val Glu	Lys Phe	Glu Leu 740	Ser 725 Arg	710 Gln Lys	Glu Arg	Asp Glu	Asp Glu 745	61y 730 Leu	715 Lys Gln	Lys Gly Gln	Ala 11e	Leu Leu 750	Asn 735 Ser	720 11e Arg
705 Ser Val	Lys Val Glu	Lys Phe	Glu Leu 740	Ser 725 Arg	710 Gln Lys	Glu Arg Arg	Asp Glu	Asp Glu 745 Asn	61y 730 Leu	715 Lys Gln	Lys Gly Gln	Ala 11e	Leu Leu 750	Asn 735 Ser	720 11e Arg
705 Ser Val	Lys Val Glu Lys	Lys Phe Gln 755	Glu Leu 740 Phe	Ser 725 Arg Glu	710 Gln Lys Ala	Glu Arg Arg	Asp Glu Pro 760	Asp Glu 745 Asn	Gly 730 Leu Lys	715 Lys Gln Ser	Lys Gly Gln Gly	Ala 11e Leu 765	Leu Leu 750 Lys	Asn 735 Ser Thr	720 11e Arg Phe
705 Ser Val	Lys Val Glu Lys	Lys Phe Gln 755	Glu Leu 740 Phe	Ser 725 Arg Glu	710 Gln Lys Ala	Glu Arg Arg Glu	Asp Glu Pro 760	Asp Glu 745 Asn	Gly 730 Leu Lys	715 Lys Gln Ser	Lys Gly Gln Gly	Ala 11e Leu 765	Leu Leu 750 Lys	Asn 735 Ser Thr	720 11e Arg Phe
705 Ser Val Val	Lys Val Glu Lys Thr 770	Lys Phe G1n 755 Leu	Glu Leu 740 Phe Leu	Ser 725 Arg Glu Asn	710 Gln Lys Ala Thr	Glu Arg Arg Glu	Asp Glu Pro 760 Pro	Asp Glu 745 Asn Gly	Gly 730 Leu Lys Trp	715 Lys Gln Ser Leu	Lys Gly Gln Gly 11e 780	Ala 11e Leu 765 Ser	Leu Leu 750 Lys Glu	Asn 735 Ser Thr	720 11e Arg Phe Lys
705 Ser Val Val	Lys Val Glu Lys Thr 770	Lys Phe G1n 755 Leu	Glu Leu 740 Phe Leu	Ser 725 Arg Glu Asn	710 Gln Lys Ala Thr	Glu Arg Arg Glu lle 775	Asp Glu Pro 760 Pro	Asp Glu 745 Asn Gly	Gly 730 Leu Lys Trp	715 Lys Gln Ser Leu	Lys Gly Gln Gly 11e 780	Ala 11e Leu 765 Ser	Leu Leu 750 Lys Glu	Asn 735 Ser Thr	720 11e Arg Phe Lys
705 Ser Val Val Gln Arg 785	Lys Val Glu Lys Thr 770 Glu	Lys Phe Gln 755 Leu Tyr	Glu Leu 740 Phe Leu	Ser 725 Arg Glu Asn Val	710 Gln Lys Ala Thr His 790	Glu Arg Arg Glu lle 775	Asp Glu Pro 760 Pro	Asp Glu 745 Asn Gly Met	Gly 730 Leu Lys Trp	715 Lys Gln Ser Leu Asn 795	Lys Gly Gln Gly He 780 Asn	Ala 11e Leu 765 Ser Leu	Leu 750 Lys Glu Glu	Asn 735 Ser Thr Asp	720 11e Arg Phe Lys Val 800
705 Ser Val Val Gln Arg 785	Lys Val Glu Lys Thr 770 Glu	Lys Phe Gln 755 Leu Tyr	Glu Leu 740 Phe Leu	Ser 725 Arg Glu Asn Val	710 Gln Lys Ala Thr His 790	Glu Arg Arg Glu lle 775	Asp Glu Pro 760 Pro	Asp Glu 745 Asn Gly Met	Gly 730 Leu Lys Trp	715 Lys Gln Ser Leu Asn 795	Lys Gly Gln Gly He 780 Asn	Ala 11e Leu 765 Ser Leu	Leu 750 Lys Glu Glu	Asn 735 Ser Thr Asp	720 11e Arg Phe Lys Val 800
705 Ser Val Val Gln Arg 785 Lys	Lys Val Glu Lys Thr 770 Glu Glu	Lys Phe Gln 755 Leu Tyr	Glu Leu 740 Phe Leu Ala	Ser 725 Arg Glu Asn Val Thr 805	710 Gln Lys Ala Thr His 790 His	Glu Arg Arg Glu lle 775	Asp Glu Pro 760 Pro Ala Lys	Asp Glu 745 Asn Gly Met	Gly 730 Leu Lys Trp Glu Gln 810	715 Lys Gln Ser Leu Asn 795 Ala	Lys Gly Gln Gly 11e 780 Asn Glu	Ala 11e Leu 765 Ser Leu	Leu 750 Lys Glu Glu Met	Asn 735 Ser Thr Asp Lys Leu 815	720 lle Arg Phe Lys Val 800 Val
705 Ser Val Val Gln Arg 785 Lys	Lys Val Glu Lys Thr 770 Glu Glu	Lys Phe Gln 755 Leu Tyr	Glu Leu 740 Phe Leu Ala	Ser 725 Arg Glu Asn Val Thr 805	710 Gln Lys Ala Thr His 790 His	Glu Arg Arg Glu lle 775 lle	Asp Glu Pro 760 Pro Ala Lys	Asp Glu 745 Asn Gly Met	Gly 730 Leu Lys Trp Glu Gln 810	715 Lys Gln Ser Leu Asn 795 Ala	Lys Gly Gln Gly 11e 780 Asn Glu	Ala 11e Leu 765 Ser Leu	Leu 750 Lys Glu Glu Met	Asn 735 Ser Thr Asp Lys Leu 815	720 lle Arg Phe Lys Val 800 Val

Ser Asn Val His Val Ser Asn Asn Lys Asn Ser Glu Gln Lys <210> 3352 <211> 198 <212> PRT <213> Homo sapiens ⟨400⟩ 3352 Met Asn Phe Val Leu Val Lys Val Arg Tyr Asp Val Val Gly Met Phe Trp Asn Met Phe Phe Gln Val Ala Ser Gly Gly Gly Val Gly Asp Gly Val Gln Glu Pro Thr Thr Gly Asn Trp Arg Gly Met Leu Lys Thr Ser Lys Ala Glu Glu Leu Leu Ala Glu Glu Lys Ser Lys Pro lle Pro Ile Met Pro Ala Ser Pro Gln Lys Lys Lys Lys Ile Lys Gln His Pro Asp Arg Tyr Thr Tyr Ser Phe Arg Leu Thr Asp Leu Ser Cys Ile Tyr Gly Val Val Met Arg Phe Arg Thr Tyr Thr Tyr Phe Val Lys lle Pro Gln Met Ile Leu Gly Met Asn Asp Tyr Ile Ile Asn Phe Lys Met Tyr Leu Glu 11e Leu Lys Thr Ser Ser Pro Val Ser Asn Arg Gln His 11e Tyr lle Ala Asp lle Thr Phe Phe Ser Val Tyr Asp Gln Val Phe Met Lys Asp Tyr Trp Gln Gly Lys Tyr Glu Tyr Val Asn Phe Ser Leu Trp His Gln Phe Thr Lys Glu Gln Gln Ala His Gln Leu Met Ser Asn Ile

Lys Thr Pro Thr Ser Val

⟨210⟩ 3353

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3353

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al Dra Car Dra Thr Cla Lau Cua Dra Lau Car Lau Dra Tra Dra 1

Val Pro Ser Pro Thr Gln Leu Cys Pro Leu Ser Leu Pro Trp Pro Thr
20 25 30

Gln Leu Leu Gln Gln Thr Pro Val Gly Leu His Trp Ser Arg Gln Gln
35 40 45

Glu Gly Pro Gln Ala Leu Ser Tyr Trp Glu Ser Gly Asp Gly Thr Gly
50 55 60

Thr Arg Leu Leu Arg Lys Glu Gly Ser Trp Pro Val Gln Asn Val Ala 65 70 75 80

Asp Gly Pro Ala Trp Trp Leu Met Pro Val Val Leu Ala Leu Gly Glu 85 90 95

Ala Glu Ala Asp Arg Ser Pro Glu Val Gly Ser Pro Thr Pro Ala Trp \$100\$ \$105\$ \$110\$

Pro Ala

<210> 3354

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3354

Met Gly Phe Val Asn Ser Arg Lys Gly Thr Lys Phe Cys Leu Lys Arg

1 5 10 15

Glu Gly Phe Ser Lys Gly Val Met Phe Asp Leu Arg Pro Arg Glu Gly

			20					25					30		
Glu	Arg	Lys	Glu	Ala	Cys	Arg	Gly	Ala	Leu	Val	Thr	Arg	Gly	Met	Leu
		35					40					45			
Tyr	Cys	Val	Asp	Ser	Arg	Asn	Arg	Gly	Glu	Ala	Leu	Ala	Ĺeu	Ser	Leu
	50					55					60				•
Ser	Ala	Phe	Trp	Phe	Met	Gln	Leu	Ser	Leu	Pro	Lys	lle	Phe	Phe	Tyr
65					70					75					80
Leu	Cys	Phe	Cys	Leu	Gln	Leu	Leu	Pro	Leu	Glu	Val	Ser	Leu	Ser	Phe
				85					90					95	
Lys	Phe	Arg	Glu	Pro	Cys	Leu	Trp	His							
			100					105							
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			Asn	Lvs	Met	Val	Asp	011		fil v	Sor	(In	1 011	Arg	
	Pro	Leu	пор					Leu		Oly	361	0111	Leu		Arg
1				5					10					15	
1			His	5	Cys			Arg	10				Leu	15	
1 Phe	Pro	Leu	His 20	5 Val	Cys	Ser	Phe	Arg 25	10 Glu	Leu	Va]	Lys	Leu 30	15 Tyr	Leu
1 Phe	Pro	Leu Asn	His 20	5 Val		Ser	Phe Leu	Arg 25	10 Glu	Leu	Va]	Lys	Leu 30	15 Tyr	Leu
1 Phe Ser	Pro Asp	Leu Asn 35	His 20 His	5 Va] Leu	Cys Asn	Ser Ser	Phe Leu 40	Arg 25 Pro	10 Glu Pro	Leu Glu	Va] Leu	Lys Gly 45	Leu 30 Gln	15 Tyr Leu	Leu Gln
1 Phe Ser	Pro Asp	Leu Asn 35	His 20 His	5 Va] Leu	Cys	Ser Ser Leu	Phe Leu 40	Arg 25 Pro	10 Glu Pro	Leu Glu	Va] Leu Phe	Lys Gly 45	Leu 30 Gln	15 Tyr Leu	Leu Gln
l Phe Ser Asn	Pro Asp Leu 50	Leu Asn 35 G1n	His 20 His	5 Val Leu Leu	Cys Asn Ala	Ser Ser Leu 55	Phe Leu 40 Asp	Arg 25 Pro Phe	10 Glu Pro Asn	Leu Glu Asn	Val Leu Phe 60	Lys Gly 45 Lys	Leu 30 Gln Ala	15 Tyr Leu Leu	Leu Gln Pro
l Phe Ser Asn Gln	Pro Asp Leu 50	Leu Asn 35 G1n	His 20 His	5 Val Leu Leu	Cys Asn Ala Leu	Ser Ser Leu 55	Phe Leu 40 Asp	Arg 25 Pro Phe	10 Glu Pro Asn	Leu Glu Asn	Val Leu Phe 60	Lys Gly 45 Lys	Leu 30 Gln Ala	15 Tyr Leu Leu	Leu Gln Pro
1 Phe Ser Asn G1n 65	Pro Asp Leu 50 Val	Leu Asn 35 Gln Val	His 20 His 11e Cys	5 Val Leu Leu Thr	Cys Asn Ala Leu 70	Ser Ser Leu 55 Lys	Phe Leu 40 Asp G1n	Arg 25 Pro Phe Leu	10 Glu Pro Asn Cys	Leu Glu Asn Ile 75	Va] Leu Phe 60 Leu	Lys Gly 45 Lys Tyr	Leu 30 Gln Ala Leu	15 Tyr Leu Leu Gly	Leu Gln Pro Asn 80
1 Phe Ser Asn G1n 65	Pro Asp Leu 50 Val	Leu Asn 35 Gln Val	His 20 His 11e Cys	5 Val Leu Leu Thr	Cys Asn Ala Leu	Ser Ser Leu 55 Lys	Phe Leu 40 Asp G1n	Arg 25 Pro Phe Leu	10 Glu Pro Asn Cys Leu	Leu Glu Asn Ile 75	Va] Leu Phe 60 Leu	Lys Gly 45 Lys Tyr	Leu 30 Gln Ala Leu	15 Tyr Leu Leu Gly Asn	Leu Gln Pro Asn 80
1 Phe Ser Asn G1n 65 Asn	Pro Asp Leu 50 Val Lys	Leu Asn 35 Gln Val	His 20 His 11e Cys	5 Val Leu Leu Thr Asp 85	Cys Asn Ala Leu 70 Leu	Ser Ser Leu 55 Lys	Phe Leu 40 Asp Gln Ser	Arg 25 Pro Phe Leu Glu	10 Glu Pro Asn Cys Leu 90	Leu Glu Asn Ile 75 Ser	Va] Leu Phe 60 Leu Leu	Lys Gly 45 Lys Tyr	Leu 30 Gln Ala Leu Gln	15 Tyr Leu Leu Gly Asn 95	Leu Gln Pro Asn 80 Leu
1 Phe Ser Asn G1n 65 Asn	Pro Asp Leu 50 Val Lys	Leu Asn 35 Gln Val	His 20 His 11e Cys Cys	5 Val Leu Leu Thr Asp 85	Cys Asn Ala Leu 70	Ser Leu 55 Lys Pro	Phe Leu 40 Asp Gln Ser	Arg 25 Pro Phe Leu Glu	10 Glu Pro Asn Cys Leu 90	Leu Glu Asn Ile 75 Ser	Va] Leu Phe 60 Leu Leu	Lys Gly 45 Lys Tyr	Leu 30 Gln Ala Leu Gln Pro	15 Tyr Leu Leu Gly Asn 95	Leu Gln Pro Asn 80 Leu
1 Phe Ser Asn 61n 65 Asn	Pro Asp Leu 50 Val Lys	Leu Asn 35 G1n Va1 Leu	His 20 His 11e Cys Trp 100	5 Val Leu Leu Thr Asp 85 11e	Cys Asn Ala Leu 70 Leu Glu	Ser Leu 55 Lys Pro	Phe Leu 40 Asp Gln Ser Asn	Arg 25 Pro Phe Leu Glu Cys 105	10 Glu Pro Asn Cys Leu 90 Leu	Leu Glu Asn Ile 75 Ser Thr	Va] Leu Phe 60 Leu Leu GIn	Lys Gly 45 Lys Tyr Leu Leu	Leu 30 Gln Ala Leu Gln Pro 110	15 Tyr Leu Leu Gly Asn 95 Asp	Leu Gln Pro Asn 80 Leu Val
1 Phe Ser Asn 61n 65 Asn	Pro Asp Leu 50 Val Lys	Leu Asn 35 G1n Va1 Leu	His 20 His 11e Cys Trp 100	5 Val Leu Leu Thr Asp 85 11e	Cys Asn Ala Leu 70 Leu	Ser Leu 55 Lys Pro	Phe Leu 40 Asp Gln Ser Asn	Arg 25 Pro Phe Leu Glu Cys 105	10 Glu Pro Asn Cys Leu 90 Leu	Leu Glu Asn Ile 75 Ser Thr	Va] Leu Phe 60 Leu Leu GIn	Lys Gly 45 Lys Tyr Leu Leu	Leu 30 Gln Ala Leu Gln Pro 110	15 Tyr Leu Leu Gly Asn 95 Asp	Leu Gln Pro Asn 80 Leu Val

Leu Arg Leu Leu Pro Gly Gln Leu Arg Arg Leu Gln Glu Leu Arg Thr

	130					135					140				
11e	Trp	Leu	Ser	Gly	Asn	Arg	Leu	Thr	Asp	Phe	Pro	Thr	Val	Leu	Leu
145					150					155					160
His	Met	Pro	Phe	Leu	Glu	Val	He	Asp	Val	Asp	Trp	Asn	Ser	lle	Arg
				165					170					175	
Tyr	Phe	Pro	Ser	Leu	Ala	His	Leu	Ser	Ser	Leu	Lys	Leu	Val	Ile	Tyr
			180					185					190		
Asp	His	Asn	Pro	Cys	Arg	Asn	Ala	Pro	Lys	Val	Λla	Lys	Gly	Val	Arg
		195					200					205			
Arg	Val	Gly	Arg	Trp	Ala	Glu	Glu	Thr	Pro	Glu	Pro	Asp	Pro	Arg	Lys
	210					215					220				
Ala	Arg	Arg	Tyr	Ala	Leu	Val	Arg	Glu	Glu	Ser	Gln	Glu	Leu	Gln	Ala
225					230					235					240
Pro	Val	Pro	Leu	Leu	Pro	Pro	Thr	Asn	Ser						
				245					250						
		•													
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<21	1> 10	06			•										
<212	2> PI	T7													
<213	3> He	omo s	sapie	ens											
<400)> 3:	356													
Met	Thr	Ser	Val	Ala	His	Met	Ser	Thr	Phe	Arg	Pro	His	Пe	Cys	His
1				5					10					15	
Lau	Ser	Lve	Thr	Ser	p_{ro}	His	p_{ro}	Leu	Val	Thr	Ara	Lvs	Ara	Ala	Ser

<210> 3357 <211> 214 <212> PRT <213> Homo sapiens <400> 3357 Met Asn Asn Glu Thr Thr Leu Ile Ser Leu Lys Glu Ala Met Lys Arg Val Asp His Lys Leu Gln Ala Leu Glu Thr Gln Phe Lys Glu Leu Asp Phe Thr Lys Asp Asn Leu Met Gln Lys Phe Glu His His Ser Lys Ala Leu Ala Ser Gln Ala Ala Gln Asp Glu Met Trp Thr Ala Val Arg Ala Leu Gln Leu Thr Ser Met Glu Leu Asn Ile Leu Tyr Ser Tyr Val lle Glu Val Leu Ile Cys Leu His Thr Arg Val Leu Glu Lys Leu Pro Asp Leu Val Arg Gly Leu Pro Thr Leu Ala Ser Val Leu Arg Arg Lys Val Lys Asn Lys Arg Val Arg Val Val Trp Glu Ser Ile Leu Glu Glu Cys Gly Leu Gln Glu Gly Asp Ile Thr Ala Leu Cys Thr Phe Phe Ile Ala Arg Gly Asn Lys Ala Glu His Tyr Thr Ala Lys Val Arg Gln Met Tyr Ile Arg Asp Val Thr Phe Leu Ile Thr Asn Met Val Lys Asn Gln Ala Leu Gln Asp Ser Leu Leu Arg Ala Val Gln Val 11e Glu Lys Gly Lys Ala Val Arg Thr Pro Glu Lys Gln Lys Ser Ser Leu Glu Glu Leu

Ile Pro Ser Val Lys Asn 210

<210> 3358

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3358

Met Gln Met Gly Asp Glu Phe Leu His Thr Leu Val Phe Leu Pro Phe
1 5 10 15

Val Asn Leu Thr Thr Asn Val Leu Ser Tyr Arg Lys Met Cys Val Arg
20 25 30

Val Cys Met Ser Glu Cys Val Arg Val Cys Val Cys Ala Cys Cys Lys 35 40 45

Asn Met Leu Glu Cys Glu Cys Gly Val Cys Leu His Val Cys Met Cys 50 55 60

Glu Cys Met His Ala Arg Val Cys Lys Ser Val His Val His Val Cys 65 70 75 80

Glu Thr Thr Gly Met Arg Tyr Val Arg Met Ser Val Cys Thr Cys Val 85 90 95

Ser Met Cys lle Val Tyr Asn Val His Glu Tyr Ser Val Arg Ala 100 105 110

<210> 3359

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3359

Met Gly Lys Arg Asp Asn Arg Val Ala Tyr Met Asn Pro Ile Ala Met

1 5 10 15

Ala Arg Ser Arg Gly Pro Ile Gln Ser Ser Gly Pro Thr Ile Gln Asp

.

20 25 30

Tyr Leu Asn Arg Pro Arg Pro Thr Trp Glu Glu Val Lys Glu Gln Leu Glu Lys Lys Lys Gly Ser Lys Ala Leu Ala Glu Phe Glu Glu Lys Met Asn Glu Asn Trp Lys Lys Glu Leu Glu Lys His Arg Glu Lys Leu Leu Ser Gly Ser Glu Ser Ser Ser Lys Lys Arg Gln Arg Lys Lys Glu Lys Lys Lys Ser Gly Arg Val Ser Lys Asn Phe Pro Phe Phe

<210> 3360

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3360

Met Glu Ala Leu Ala Ser Thr Glu Lys Met Leu Gln Asp Lys Val Asn Lys Thr Ser Lys Glu Arg Gln Gln Gln Val Glu Ala Val Glu Leu Glu Ala Lys Glu Val Leu Lys Lys Leu Phe Pro Lys Val Ser Val Pro Ser Asn Leu Ser Tyr Gly Glu Trp Leu His Gly Phe Glu Lys Lys Ala Lys Glu Cys Met Ala Gly Thr Ser Gly Ser Glu Glu Val Lys Val Leu Glu His Lys Leu Lys Glu Ala Asp Glu Met His Thr Leu Leu Gln Leu Glu Cys Glu Lys Tyr Lys Ser Val Leu Ala Glu Thr Glu Gly lle Leu Gln Lys Leu Gln Arg Ser Val Glu Glu Glu Glu Asn Lys Trp Lys Val Lys

Val Asp Glu Ser His Lys Thr lle Lys Gln Met Gln Ser Ser Phe Thr

Ser Ser Glu Gln Glu Leu Glu Arg Leu Arg Ser Glu Asn Lys Asp 11e 145 150 155 Glu Asn Leu Arg Arg Glu Arg Glu His Leu Glu Met Glu Leu Gly Lys 165 170 175 Ala Glu Met Glu Arg Ser Thr Tyr Val Thr Glu Val Arg Glu Leu Lys 180 185 Ala Gln Leu Asn Glu Thr Leu Thr Lys Leu Arg Thr Glu Gln Asn Glu 200 205 Arg Gln Lys Val Ala Gly Asp Leu His Lys Ala Gln Gln Ser Leu Glu 210 215 220 Leu lle Gln Ser Lys Ile Val Lys Ala Ala Gly Asp Thr Thr Val lle 230 235 Glu Asn Ser Asp Val Ser Pro Glu Thr Glu Ser Ser Glu Lys Glu Thr 245 250 255 Met Ser Val Ser Leu Asn Gln Thr Val Thr Gln Leu Gln Gln Leu Leu 260 265 Gln Ala Val Asn Gln Gln Leu Thr Lys Glu Lys Glu His Tyr Gln Val 275 280 285 Leu Glu 290 <210> 3361 <211> 142 <212> PRT <213> Homo sapiens <400> 3361

(400) 5501

Met Ala Ala Ala Arg Thr Pro Pro Gly Gln Gln Pro Arg Leu Thr Ser 1 5 10 15

Pro Pro Pro Pro Ser 11e Ser Pro Ala Ala Trp Arg Trp Glu Ala Ala 20 25 30

Pro Arg Gly His Gly Pro Ser Pro Lys Ala His Thr Pro Ala Phe Arg 35 40 45

Arg His Pro Pro Leu Thr Thr Ala Arg Glu Val Ala Arg Val Arg Thr

55 Leu His Pro Gln Asp Val Ala Leu Ala Gly Pro Pro Gly Ser Gly Cys 70 75 Leu Arg Trp Val Trp Asp Leu Ser Cys Gly Val Phe Asp Gly Gly Trp 90 Leu Gly Arg Glu Ala Ser Ser Val Gly Arg Gly Pro Arg Gly Pro Gly 105 Ala Ala Val Val Lys Met Arg Arg His Gly Gly Arg Gly Lys Ala Pro 115 120 125 Leu Pro Ser Ser Thr Pro Ala Pro Gly Asp Cys Phe Leu Tyr 130 135 140

<210> 3362

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3362

Met Leu Arg Gln Cys Tyr Lys Glu Asp Gly Ser Ser Lys Ser Pro Asp 1 5 10 Cys Pro Val Cys Ser Arg Ser Leu Asn Lys Leu Ala Gln Pro Leu Pro 25 Met Ala His Cys Ala Asn Ser Arg Leu Val Cys Lys lle Ser Gly Asp 35 45 Val Met Asn Glu Asn Asn Pro Pro Met Met Leu Pro Asn Gly Tyr Val 55 Tyr Gly Tyr Asn Val Arg Gly Ala Gly Gln Gly Gln Ala Gly Thr 70 75 80 His Arg His Arg Asp Arg Ala Val Trp Asp Gly Gln Gly Arg Gly Ala 85 90 Arg Leu Ala Arg 11e Ala 11e Gly Thr Gly Leu Cys Gly Thr Gly Arg 105 Ala Gly Gly Gln Ala Gly Thr Arg Arg His Arg Asp Arg Ala Val Trp 115 120 125

Gly Gly Gln Gly Ser Gly Ala Arg Leu Ala His Val Ala Ile Gly Thr

130 135 140
Gly Leu Ser Ser Arg Pro Thr Leu Pro
145 150

<210> 3363

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3363

Met Ser Met Lys Leu Ser Val Thr Cys Glu Ser Ala Val Pro Met Ser 1 5 10 15

The Tyr Val Leu Asn Leu Leu Leu Phe Gln Lys Arg Gly Leu Ala His
20 25 30

Gln Leu Glu Glu Tyr Leu Leu Lys Trp Arg Arg Asn Lys Ala Thr Lys 35 40 45

Val Ala Lys Ile Ser Ser Glu Gln Lys Lys Ile Leu Arg Arg Lys Met 50 55 60

Val Leu Gln Leu Val Leu Gln Gly Leu Ala Thr Cys Val Ser His Ser 65 70 75 80

Arg Ala Ala Asn His Gly Val Gly Pro Ser His Phe Ala Gln Gly Gly
85 90 95

Leu Arg Ser Ser Gly Lys Val Leu Leu Gln Val Thr Asp Tyr Arg Cys 100 105 110

Val Val Glu Gly Gln Ala 115

<210> 3364

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3364

Met Trp Ser Leu Pro His Pro Thr Trp Thr Leu Asp Ser Thr Cys Tyr

5 10 Ala Ala Ala Pro Ala Trp Ala Ser Phe Ser Pro Arg Thr Asp Ser Asp 20 25 lle Pro His Cys Ser Thr Thr Leu His Gly His Pro Pro His Pro Ala 40 35 45 Trp Ala Leu Thr Pro Tyr Ser Arg Pro Pro Pro Ala Met Ser Gly His 55 Pro Pro His Pro Ser Trp Ala Cys Lys Leu His Ile Thr Cys Prò His 65 70 75 80 Ala Trp Ile Pro Phe Ser Pro His Met Ala Ser Asp Thr Pro Pro Trp 85 90 Thr Ala IIe Leu Gln Gly Ser Thr Ser Ser Pro Ala Gln Ala Cys Trp 105 Pro Pro Ala Trp Met Leu Phe Phe Thr Gly Pro Ala Leu Thr Pro Pro 115 120 125 Gly Ala Ser Cys Ala Gly Val Phe Leu Thr Leu Leu Gly Leu 130 135 140

<210> 3365

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3365

Met Asp Pro Val Ala Ser Ser Ser 11e Arg Pro Glu Pro Asp Ser His 1 5 10 15

Tyr Leu Gln Phe Gln Thr Gln Pro His Val Leu Trp Asn Arg Leu Pro
20 25 30

Glu Ala Trp Asp Arg Ser Glu Ser Leu Asp Ser Ser Trp Gly Gly Trp
35 40 45

Val Gly Val Arg Gly Arg Val Pro Glu Gly Pro His Ser Thr Leu Ser 50 55 60

Trp Ser Ala Gly Gln Gln Glu Glu Gln Ala Trp Gly Trp Leu Trp Ser
65 70 75 80

Leu Pro Pro Arg Ser Glu Ala Val Arg Gln Glu Lys Gly Glu Lys Glu

<210> 3366

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3366

Met Pro Gin Thr Lys Asp Glu Gly Gly Gly Arg Trp Gly Val Gly Gly 1 5 10 15

Leu Ser Asn Lys Val Trp Cys Cys Arg Thr Phe Ser Phe Phe Phe Phe 20 25 30

Phe Phe Phe Phe Phe Leu Phe Phe Phe Phe Phe Phe Val Val Val Val 35 40 45

Val Val Phe Val Phe Ile Phe Phe Leu Leu Ser Ser Phe
50 55 60

Phe Leu Leu Pro Ser Ser Ser Phe Phe Leu Leu Leu Val Ser Leu Cys
65 70 75 80

Tyr Pro Ala Trp Ser Ala Leu Arg Gln Ser Gln Leu Thr Ala Thr Ser 85 90 95

Thr Cys Gln Val

<210> 3367

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3367

Met Arg Val Leu Ser Arg Gly Gly Phe Gln Arg Val Lys Gly Arg His

5 10 15 Leu Pro Gln Leu Met Pro Gln Ser Ala Ala Pro Gln Val Ala Glu Glu 25 20 Gly Leu Phe Pro Gly Met Ile Leu Gln Thr Asn Ile Lys Ala Ile Val 35 40 45 Pro Leu Gly Leu Cys Leu Gly Arg Leu Lys Leu Arg Lys Leu Pro Lys 55 Val Ala Val Leu Met Ser Ala Ala Leu Lys Pro Lys Asp Met Gln Phe 70 75 80 Phe Phe Phe Phe Glu Met Glu Ser Cys Pro Val Ala Arg Leu Glu 85 90 Cys Ser Gly Val Ile Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser 100 105 110 Ser Asp Ser Ser Ala Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Thr 115 120 125 Cys His Tyr Thr Gln lle Val Phe Val Phe Leu Val Glu Met Gly Phe 135 His His Val Gly Gln Asp Gly Leu Asp Leu Leu Thr Leu 150 155

<210> 3368

<211> 342

<212> PRT

<213> Homo sapiens

<400> 3368

Met Asn Pro Ser Glu Met Gln Gly Lys Ala Pro Pro Gln Arg Gln Arg

1 5 10 15

Thr Arg Asn Arg Thr Ser Leu Thr Arg Arg Val Asn Lys Met Val 11e 20 25 30

Ser Glu Glu Gln Met Lys Leu Pro Ser Thr Lys Lys Ala Gly Pro Pro
35 40 45

Thr Trp Ala Gln Leu Lys Lys Leu Thr Gln Leu Ala Glu Lys Ser Leu

50

55

Glu	Asn	Thr	Arg	Val	Thr	G1n	Thr	Pro	Glu	Asn	Lys	Leu	Leu	Ala	Ala
65					70					75					80
Leu	Met	Пе	Val	Ser	Thr	Val	Val	Ser	Leu	Pro	Met	Ser	Ala	G1y	Ala
				85					90					95	
Ala	Thr	Ala	۸sn	Tyr	Thr	Tyr	Trp	Ala	Tyr	Val	Pro	Phe	Pro	Pro	Leu
			100					105					110		
He	Arg		Val	Thr	Trp	lle	Asp	Asn	Pro	He	Glu		Tyr	Val	Asn
		115					120					125			
Asn		Ala	Trp	Val	Pro		Pro	Thr	Asp	Asp		Gly	Pro	Ala	Gln
	130					135					140				
	Glu	Glu	Glu	Gly	Met	Met	lle	Asn	He		He	Gly	Tyr	His	
145					150					155					160
Pro	Ser	He	Cys		Gly	Lys	Thr	Pro		Cys	Leu	Met	Pro		He
0.1		Tr.		165	61	0.1		m.	170		. 1	(P)		175	70.1
GIn	Asn	lrp		Val	Glu	Glu	Pro		Val	Ser	Ala	Ihr		Lys	Phe
TI.	т	и: .	180	11.	C	C1	14 4	185		C1	C	C1	190	Δ	Δ
Inr	lyr		мет	116	Ser	61 y	ме t 200	ser	Leu	GIŸ	ser	205	мет	Asn	ASN
Lou	Cln	195	Sor	Sor	Tur	Cln		Sor	Lou	lvc	Pho		Dro	Lvc	Trn
Leu	210	ASII	361	261	Tyr	215	AI g	261	Leu	Lys	220	ΛI g	110	Lys	11 þ
lve		Cve	Gln	lve	Glu		Pro	Glu	Glu	Ser		Aen	Pro	Glu	Val
225	110	0,3	OIII	LyS	230	110	110	Olu	014	235	Lys	пор	110	Ģīu	240
	Val	Trn	Glu	Glu	Cys	Val	Ala	Asp	Thr		Val	Val	Leu	Gln	
,,,,,			0.10	245	0,10				250				1300	255	
Asn	Lvs	Phe	Arg		lle	lle	Asp	Trp		Pro	Arg	Glv	Gln		Tvr
	•		260				·	265			Ŭ	·	270		-
Tyr	Asp	Cys		Gly	Gln	Thr	His		Cys	Ser	Gln	Ala	Pro	Ser	Val
		275					280					285			
Trp	Pro	Thr	Asn	Leu	Ala	Tyr	Asp	Gly	Asp	Leu	Thr	Lys	Arg	Leu	Asp
	290					295					300				
Gln	Val	Tyr	Arg	Arg	Leu	Glu	Ser	Pro	Tyr	Ser	Trp	Lys	Trp	Gly	Glu
305					310					315					320
Lys	Gly	11e	Pro	Ser	Pro	Arg	Pro	Lys	Leu	Val	Ser	Pro	Val	Val	Gly
				325					330					335	
Pro	Glu	His	P.ro	Glu	Leu										
			340												

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<211> 377
<212> PRT
<213> Homo sapiens
<400> 3369
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Ala Pro Ala Pro Ala Ala Ser Gly Ala Ala Arg Asn Ser His Ser Ala
                                 25
Ala Ser Arg Asp Pro Pro Ala Ser Ala Lys Pro Leu Leu Arg Trp Asp
         35
                             40
                                                 45
Glu Val Pro Asp Asp Phe Val Glu Cys Phe 11e Leu Ser Gly Tyr Arg
                         55
                                              60
Arg Leu Pro Cys Thr Ala Gln Glu Cys Leu Ala Ser Val Leu Lys Pro
                     70
                                         75
Thr Asn Glu Thr Leu Asn Phe Trp Thr His Phe 11e Pro Leu Leu Leu
                 85
                                     90
Phe Leu Ser Lys Phe Cys Arg Leu Phe Phe Leu Ser Gly Gly Asp Val
                                105
Pro Phe His His Pro Trp Leu Leu Pro Leu Trp Cys Tyr Ala Ser Gly
        115
                            120
                                                 125
Val Leu Leu Thr Phe Ala Met Ser Cys Thr Ala His Val Phe Ser Cys
    130
                        135
Leu Ser Leu Arg Leu Arg Ala Ala Phe Phe Tyr Leu Asp Tyr Ala Ser
                    150
                                        155
Ile Ser Tyr Tyr Gly Phe Gly Ser Thr Val Ala Tyr Tyr Tyr Leu
                165
                                    170
Leu Pro Gly Leu Ser Leu Leu Asp Ala Arg Val Met Thr Pro Tyr Leu
                                185
Gln Gln Arg Leu Gly Trp His Val Asp Cys Thr Arg Leu Ile Ala Ala
        195
                            200
                                                 205
Tyr Arg Ala Leu Val Leu Pro Val Ala Phe Val Leu Ala Val Ala Cys
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<210> 3369

Thr Val Ala Cys Cys Lys Ser Arg Thr Asp Trp Cys Thr Tyr Pro Phe 225 230 235 Ala Leu Arg Thr Phe Val Phe Val Met Pro Leu Ser Met Ala Cys Pro 245 250 255 lle Met Leu Glu Ser Trp Leu Phe Asp Leu Arg Gly Glu Asn Pro Thr 260 265 Leu Phe Val His Phe Tyr Arg Arg Tyr Phe Trp Leu Val Val Ala Ala 280 Phe Phe Asn Val Ser Lys Ile Pro Glu Arg Ile Gln Pro Gly Leu Phe 295 300 Asp Ile Ile Gly His Ser His Gln Leu Phe His Ile Phe Thr Phe Leu 310 315 Ser Ile Tyr Asp Gln Val Tyr Tyr Val Glu Glu Gly Leu Arg Gln Phe 325 330 335 Leu Gln Ala Pro Pro Ala Ala Pro Thr Phe Ser Gly Thr Val Gly Tyr 340 345 350 Met Leu Leu Val Val Cys Leu Gly Leu Val Ile Arg Lys Phe Leu 360 365 Asn Ser Ser Glu Phe Cys Ser Lys Lys 370 375

<210> 3370

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3370

 Met
 Pro
 Ala
 Ser
 Ser
 Leu
 Leu
 Ser
 Ile
 Leu
 Pro
 Pro
 Arg
 Tyr
 Ile
 Ser

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 Asn
 Leu
 Pro
 Thr
 Pro
 Pro
 Pro
 Pro
 Arg
 Leu
 Val
 Gln
 Ala

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 46</td

Gln Ala Gly Val Gln Trp His Asp Leu Ser Ser Leu Gln Pro Leu Pro 75 Pro Met Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro Arg Ser Trp Asp 85 Tyr Trp His Ala Pro Pro His Gln Ala Asn Phe Ile Phe Leu Val Glu 105 Met Gly Phe His Pro Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser . 120 Gly Asp Pro Pro Ala Ser Ala Ser Arg Ser Ala Gly Ile Thr Gly Met 130 135 140 Asn His His Gly Arg Leu Thr Phe Ile Leu Ser Leu Val Leu Leu Glu 150 155 Tyr Ser Gln Ile Ile Phe His Cys Val Tyr Ile Pro His Phe Ala His 165 170 175 Trp Phe Leu Met Val Arg Ser Glu Leu Trp Val Asp Leu Ala Ile Gly 180 185 190 Arg

<210> 3371

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3371

65

 Met
 Phe
 Arg
 Lys
 Thr
 Thr
 Ser
 Phe
 P

70

75

Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Trp Ala Ser Gln Ser Ala 85 90 95 Gln Ile Thr Gly Val Ser His Arg Ala Gln Ser Glu Asn Tyr Leu Tyr 100 105 110 Tyr Cys Ser Cys Ile Leu Lys Asn Ser Leu Arg Pro

<210> 3372

<211> 515

<212> PRT

<213> Homo sapiens

<400> 3372 Met Leu Met His Trp Gly Trp Phe Leu Glu His Asp Leu Asp His Thr 1 5 10 Val Pro Ala Leu Ser Thr Ala Arg Phe Ser Asp Gly Arg Pro Cys Asn 25 Ser Val Cys Thr Asn Asp Pro Pro Cys Phe Pro Met Asn Thr Arg His 35 40 45 Ala Asp Pro Arg Gly Thr His Ala Pro Cys Met Leu Phe Ala Arg Ser 55 60 Ser Pro Ala Cys Ala Ser Gly Arg Pro Ser Ala Thr Val Asp Ser Val 70 75 65 80 Tyr Ala Arg Glu Gln Ile Asn Gln Gln Thr Ala Tyr lle Asp Gly Ser 85 90 Asn Val Tyr Gly Ser Ser Glu Arg Glu Ser Gln Ala Leu Arg Asp Pro 105 Ser Val Pro Arg Gly Leu Leu Lys Thr Gly Phe Pro Trp Pro Pro Ser 115 125 120 Gly Lys Pro Leu Leu Pro Phe Ser Thr Gly Pro Pro Thr Glu Cys Ala 135 140 Arg Gln Glu Gln Glu Ser Pro Cys Phe Leu Ala Gly Asp His Arg Ala 145 150 155 160

Asn Glu His Leu Ala Leu Ala Ala Met His Thr Leu Trp Phe Arg Glu

165

170

His	Asn	Arg	Val	Ala	Thr	Glu	Leu	Ser	Ala	Leu	Asn	Pro	His	Trp	Glu
			180					185					190		
Gly	Asn	Thr	Val	Tyr	Gln	Glu	Ala	Arg	Lys	lle	Val	Gly	Ala	Glu	Leu
		195					200					205			
Gln	His	He	Thr	Ţyr	Ser	His	Trp	Leu	Pro	Lys	Val	Leu	Gly	Asp	P.ro
	210					215					220				
Gly	Thr	Arg	Met	Leu	Arg	Gly	Tyr	Arg	Gly	Tyr	Asn	Pro	Asn	Val	Λsn
225					230					235					240
Ala	Gly	He	He	Asn	Ser	Phe	Ala	Thr	Ala	Ala	Phe	Arg	Phe	Gly	His
				245					250					255	
Thr	Leu	lle	Asn	Pro	Пе	Leu	Tyr	Arg	Leu	Asn	Ala	Thr	Leu	Gly	Glu
			260					265					270		
Пе	Ser	Glu	Gly	His	Leu	Pro	Phe	His	Lys	Ala	Leu	Phe	Ser	Pro	Ser
		275					280					285			
Arg	He	He	Lys	Glu	Gly	Gly	He	Asp	Pro	Val	Leu	Arg	Gly	Leu	Phe
	290					295					300				
Gly	Val	Ala	Ala	Lys	Trp	Arg	Ala	Pro	Ser	Tyr	Leu	Leu	Ser	Pro	Glu
305					310					315					320
Leu	Thr	Gln	Arg	Leu	Phe	Ser	Ala	Ala	Tyr	Ser	Ala	Ala	Val	Asp	Ser
				325					330					335	
Ala	Ala	Thr	He	He	Gln	Arg	Gly	Arg	Asp	llis	Gly	lle	Pro	Pro	Tyr
			340					345					350		
Val	Asp	Phe	Arg	Val	Phe	Cys	Asn	Leu	Thr	Ser	Val	Lys	Asn	Phe	Glu
		355					360					365			
Asp	Leu	Gln	Asn	Glu	He	Lys	Asp	Ser	Glu	lle	Arg	Gln	Lys	Leu	Arg
	370					375					380				
Lys	Leu	Tyr	Gly	Ser	Pro	Gly	Asp	lle	Asp	Leu	Trp	Pro	Ala	Leu	Met
385					390					395					400
Val	Glu	Asp	Leu	lle	Pro	Gly	Thr	Arg	Val	Gly	Pro	Thr	Leu	Met	Cys
				405					410					415	
Leu	Phe	Val		Gln	Phe	Gln	Arg	Leu	Arg	Asp	Gly	Asp	Arg	Phe	Trp
			420					425					430		
Tyr	Glu		Pro	Gly	Val	Phe		Pro	Ala	Gln	Leu		Gln	Leu	Lys
		435					440					445			
Gln		Ser	Leu	Ser	Arg	Val	Leu	Cys	Asp	Asn		Asp	Ser	lle	Gln
	450					455					460				

Gln Val Gln Ala Asp Val Phe Val Lys Ala Glu Tyr Pro Gln Asp Tyr Leu Asn Cys Ser Glu lle Pro Lys Val Asp Leu Arg Val Trp Gln Asp Cys Cys Ala Asp Lys Gln Ala Gly Gly Thr Pro Glu Ala Gly Arg Val Tyr Arg Cys <210> 3373 <211> 166 <212> PRT <213> Homo sapiens <400> 3373 Met Trp Thr Glu Trp Gly Pro Val Gly Gly Pro Ser Ala Ala Pro Tyr Gly Gln Asp Pro His Arg Leu Gly Cys Ser Gly Pro Gln Val Ala Leu Val Trp Gly Glu Lys Ala Gln Gln Ala Glu Pro Gly Phe Leu Pro His Pro His Ile Pro Val Tyr Leu Leu Asp Leu Gln Pro Gln Ile Pro Gly Pro Leu Thr Trp Leu Arg Asn Arg Val Arg Ala Gly Val Leu Ser Arg Gly Trp Ala Arg Glu Pro Gly Ser Gly Arg Gln Ser Trp Cys Pro Gly Gly Gly Gly Pro Gly Arg Leu His Trp Glu Pro Ala Pro Gly Trp Gly Val Pro Gln Ala Tyr Arg Glu Gln Thr Leu Leu Łeu Arg Arg Gly Gly Leu Gln Pro Ala Val Leu Ser Leu Arg Val Leu His Leu Leu Asp Ala

Gly Thr Gln Gln Leu lle Leu Glu Gln Gly Arg Val Gly Gln Ala Val

Cys Gly His Gln Ala Gln

<210> 3374 <211> 868 <212> PRT <213> Homo sapiens

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Ala	Ser	Leu	Arg	Asp	Ser	Gly	Val	Glu	He	Phe	Thr	Phe	Gly	He	Trp
	210					215					220				
Gln	Gly	Asn	He	Arg	Glu	Leu	Asn	Asp	Met	Ala	Ser	Thr	Pro	Lys	Glu
225					230					235					240
Glu	His	Cys	Tyr	Leu	Leu	His	Ser	Phe	Glu	Glu	Phe	Glu	Ala	Leu	Ala
				245					250					255	
Arg	Arg	Ala	Leu	His	Glu	Asp	Leu	Pro	Ser	Gly	Ser	Phe	He	Gln	Asp
			260					265					270		
Asp	Met	Val	His	Cys	Ser	Tyr	Leu	Cys	Asp	Glu	Gly	Lys	Asp	Cys	Cys
		275					280					285			
Asp	Arg	Met	Gly	Ser	Cys	Lys	Cys	Gly	Thr	His	Thr	Gly	His	Phe	Glu
	290					295					300				
Cys	He	Cys	Glu	Lys	Gly	Tyr	Tyr	Gly	Lys	Gly	Leu	Gln	Tyr	$Gl\mathbf{u}$	Cys
305					310					315					320
Thr	Ala	Cys	Pro	Ser	Gly	Thr	Tyr	Lys	Pro	Glu	Gly	Ser	Pro	Gly	Gly
				325					330					335	
lle	Ser	Ser	Cys	lle	Pro	Cys	Pro	Asp	Glu	Asn	His	Thr	Ser	Pro	Pro
			340					345					350		
Gly	Ser	Thr	Ser	Pro	Glu	Asp	Cys	Val	Cys	Arg	Glu	Gly	Tyr	Arg	Ala
		355					360					365			
Ser	Gly	Gln	Thr	Cys	Glu	Leu	Val	His	Cys	Pro	Ala	Leu	Lys	Pro	Pro
	370					375					380				
Glu	Asn	Gly	Tyr	Phe	lle	Gln	Asn	Thr	Cys	Asn	Asn	His	Phe	Asn	Ala
385					390					395					400
Ala	Cys	Gly	Val	Arg	Cys	His	Pro	Gly	Phe	Asp	Leu	Val	Gly	Ser	Ser
				405					410					415	
lle	lle	Leu	Cys	Leu	Pro	Asn	Gly	Leu	Trp	Ser	Gly	Ser	Glu	Ser	Tyr
			420					425					430		
Cys	Arg	Va]	Arg	Thr	Cys	Pro	His	Leu	Arg	Gln	Pro	Lys	His	Gly	His
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lle	Ser	Cys	Ser	Thr	Arg	Glu	Met	Leu	Tyr	Lys	Thr	Thr	Cys	Leu	Val
	450					455					460				
Ala	Cys	Asp	Glu	Gly	Tyr	Arg	Leu	Glu	Gly	Ser	Asp	Lys	Leu	Thr	Cys
465					470					475					480
Gln	G1 y	Asn	Ser	Gln	Trp	Asp	Gly	Pro		Pro	Arg	Cys	Val		Arg
				485					490					495	

His	Cys	Ser	Thr	Phe	Gln	Met	Pro	Lys	Asp	Val	lle	He	Ser	Pro	His
			500					505					510		
Asn	Cys	Gly	Lys	Gln	Pro	Ala	Lys	Phe	Gly	Thr	He	Cys	Tyr	Val	Ser
		515					520					525			
Cys	Arg	Gln	Gly	Phe	Пе	Leu	Ser	Gly	Val	Lys	Glu	Met	Leu	Arg	Cys
	530					535					540				
Thr	Thr	Ser	Gly	Lys	Trp	Asn	Val	Gly	Val	Gln	Ala	Ala	Val	Cys	Lys
545					550					555					560
Asp	Val	Glu	Ala	Pro	Gln	lle	Asn	Cys	Pro	Lys	Asp	Ile	Glu	Ala	Lys
				565					570					575	
Ala	Leu	Glu	Gln	Gln	Asp	Ser	Ala	Asn	Val	Thr	Trp	Gln	He	Pro	Thr
			580					585					590		
Ala	Lys	Лsp	Asn	Ser	Gly	Glu	Lys	Val	Ser	Val	His	Val	His	Pro	Ala
		595					600					605			
Phe	Thr	Pro	Pro	Tyr	Leu	Phe	Pro	Пe	Gly	Asp	Va]	Ala	He	Val	Tyr
	610					615					620				
Thr	Ala	Thr	Asp	Leu	Ser	Gly	Asn	Gln	Ala	Ser	Cys	lle	Phe	His	lle
625					630					635					640
Lys	Val	lle	Asp	Ala	Glu	Pro	Pro	Val	He	Asp	Trp	Cys	Arg	Ser	Pro
				645					650					655	
Pro	Pro	Val	Gln	Val	Ser	Glu	Lys	Val	His	Ala	Ala	Ser	Trp	Asp	Glu
			660					665					670		
Pro	Gln	Phe	Ser	Asp	Asn	Ser	Gly	Ala	Glu	Leu	Val	He	Thr	Arg	Ser
		675					680					685			
His	Thr	Gln	Gly	Asp	Leu	Phe	Pro	Gln	Gly	Glu	Thr	He	Val	Gln	Tyr
	690				1	695					700				
Thr	Ala	Thr	Asp	Pro	Ser	Gly	Asn	Asn	Arg	Thr	Cys	Asp	Ile	His	lle
705					710					715					720
Val	He	Lys	Gly	Ser	Pro	Cys	Glu	11e	Pro	Phe	Thr	Pro	Va1	Asn	Gly
				725					730					735	
Asp	Phe	He	Cys	Thr	Pro	Asp	Asn	Thr	Gly	Va1	Asn	Cys	Thr	Leu	Thr
			740					745					750		
Cys	Leu	Glu	Gly	Tyr	Asp	Phe	Thr	Glu	Gly	Ser	Thr	Asp	Lys	Tyr	Tyr
		755					760					765			
Cvs	Ala	Tyr	Glu	Asp	Gly	Val	Trp	Lys	Pro	Thr	Tyr	Thr	Thr	Glu	Trp

Pro Asp Cys Ala Lys Lys Arg Phe Ala Asn His Gly Phe Lys Ser Phe Glu Met Phe Tyr Lys Ala Ala Arg Cys Asp Asp Thr Asp Leu Met Lys Lys Phe Ser Glu Ala Phe Glu Thr Thr Leu Gly Lys Met Val Pro Ser Phe Cys Ser Asp Ala Glu Asp lle Asp Cys Arg Leu Glu Glu Asn Leu Thr Lys Lys Tyr Cys Leu Glu Tyr Asn Tyr Asp Tyr Glu Asn Gly Phe Ala Ile Gly Asn <210> 3375 <211> 166 <212> PRT <213> Homo sapiens <400> 3375 Met Ser Val Pro His Ala His Thr Gln Ser Cys Asn Asp Asn Gly Lys Lys Cys Leu Leu Thr Leu Pro Asn Val Pro Ser Gly Gly Lys Leu Pro Leu Val Glu Asn His Cys Ser lle Pro Phe His Gln Leu Arg Asp Pro Pro Pro Ser Leu Arg His Leu Gln Asp Leu Val Leu Phe Trp Ser Gly Pro Leu Gln Thr Leu Asn His Gln Pro Ala Ala Phe Val Val Leu Asp Val Ser Ala Asn Phe Ala Gly His Thr Gly Val Pro Lys Glu Val Lys Val 11e 11e Leu Gly Arg Glu Gly Glu Gly Ser Lys Arg Gly Arg Met

Arg Phe Leu Gly Arg Gly Gly Val Lys Leu Val Pro Val Leu Cys Tyr

Cys Leu Leu Pro Ser Tyr Leu Asn Leu Lys Glu Leu Pro His Leu Gln Gln Asp Leu Leu Gly Ile Gly Val Leu Leu Leu Ala Ile Asn Ser Cys Leu Gln Gly Lys Gly Gly <210> 3376 <211> 559 <212> PRT <213> Homo sapiens <400> 3376 Met Ala Gly Leu Thr Ala Ala Ala Pro Arg Pro Gly Val Leu Leu Leu Leu Leu Ser 11e Leu His Pro Ser Arg Pro Gly Gly Val Pro Gly Ala lle Pro Gly Gly Val Pro Gly Gly Val Phe Tyr Pro Ala Leu Gly Pro Glv Glv Lvs Pro Leu Lys Pro Val Pro Glv Gly Leu Ala Gly Ala Gly Leu Gly Ala Gly Leu Gly Ala Phe Pro Ala Val Thr Phe Pro Gly Ala Leu Val Pro Gly Gly Val Ala Asp Ala Ala Ala Ala Tyr Lys Ala Ala Lys Ala Gly Ala Gly Leu Gly Gly Val Pro Gly Val Gly Gly Leu Gly Val Ser Ala Ala Pro Ser Val Pro Gly Ala Val Val Pro Gln Pro Gly Ala Gly Val Lys Pro Gly Lys Val Pro Gly Val Gly Leu Pro Gly Val Tyr Pro Gly Gly Val Leu Pro Gly Ala Arg Phe Pro Gly Val Gly Val

Leu Pro Gly Val Pro Thr Gly Ala Gly Val Lys Pro Lys Ala Pro Gly

				165					170					175	
Val	Gly	Gly	Ala	Phe	Ala	Gly	He	Pro	Gly	Val	Gly	Pro	Phe	Gly	Gly
			180					185					190		
Pro	Gln	Pro	Gly	Val	Pro	Leu	Gly	Tyr	Pro	He	Lys	Ala	Pro	Lys	Leu
		195					200					205			
Pro	Gly	Gly	Tyr	Gly	Leu	Pro	Tyr	Thr	Thr	Gly	Lys	Leu	Pro	Tyr	Gly
	210					215					220				
Tyr	Gly	Pro	Gly	Gly	Val	Ala	Gly	Лlа	Ala	Gly	Lys	Ala	Gly	Tyr	Pro
225					230					235					240
Thr	Gly	Thr	Gly	Val	Gly	Pro	Gln	Ala	Lys						
				245					250					255	
Ala	Ala	Ala	Lys	Phe	Gly	Ala	Gly	Ala	Ala	Gly	Val	Leu	Pro	Gly	Val
			260					265					270		
Gly	Gly	Ala	Gly	Val	Pro	Gly	Val	Pro	Gly	Ala	11e	Pro	Gly	He	Gly
		275					280					285			
Gly	He	Ala	Gly	Val	Gly	Thr	Pro	Ala							
	290					295					300				
Ala	Ala	Lys	Ala	Ala	Lys	Tyr	Gly	Ala	Ala	Ala	Gly	Leu	Val	Pro	Gly
305					310					315					320
Gly	Pro	Gly	Phe	Gly	Pro	Gly	Val	Val	Gly	Va]	Pro	Gly	Ala	Gly	Val
				325					330					335	
Pro	Gly	Val	Gly	Val	Pro	Gly	Ala	Gly	lle	Pro	Val	Val	Pro	Gly	Ala
			340					345					350		
Gly	He	Pro	Gly	Ala	Ala	Val	Pro	Gly	Val	Val	Ser	Pro	Glu	Ala	Ala
		355	•				360					365			
Ala	Lys	Ala	Ala	Ala	Lys	Ala	Ala	Lys	Tyr	Gly	Ala	Arg	Pro	Gly	Val
	370					375					380				
G1y	Va]	Gly	Gly	lle	Pro	Thr	Tyr	Gly	Va]	Gly	Ala	Gly	Gly	Phe	Pro
385					390					395					400
Gly	Phe	61 y	Val	Gly	Val	Gly	Gly	He	Pro	Gly	Val	Ala	Gly	Val	Pro
				405					410					415	
Gly	Val	Gly	Gly	Ser	Arg	Ser	Arg	Arg	Cys	Pro	Gly	Ser	Trp	His	Phe
			420					425					430		•
Pro	Arg	Ser	Ser	Gly	Ser	Ser	Cys	Arg	GIn	Gly	Cys	Gln	Va]	Arg	Va]
		435					440					445			
Ser	Ser	Trp	Cys	Arg	Arg	Gly	Ser	Trp	Ser	Trp	Arg	Gly	Ser	Trp	Cys

450 455 460 Arg Cys Gly Ser Trp Ser Trp Leu Gly Ser Trp Ser Trp Arg Gly Ser 470 475 Trp Ser Trp Cys Gly Ser Trp Arg Trp Arg Gly Ser Arg His Trp Pro 490 Trp Trp Ser Cys Ser Cys Ser Lys 11e Arg Cys Gln Gly Gly Cys Gln 505 Ser Pro Ala Pro Ser Cys Ser Trp Ala Trp Cys Trp His Pro Trp Thr 515 520 525 Trp Ser Trp Cys Arg Arg Pro Trp Thr Trp Ser Trp Cys Trp Cys Ser 530 535 540 Trp Thr Trp Ser Trp Cys Trp Cys Ser Trp Leu Arg Gly Ser Thr 550 555

<210> 3377

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3377

Met Glu Gly Ser Arg Pro Ala Ala Pro Ala Glu Pro Gly Thr Leu Lys

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Thr Ser Leu Val Ala Thr Pro Gly Ile Asp Lys Leu Thr Glu Lys Ser
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Gln Val Ser Glu Asp Gly Thr Leu Arg Ser Leu Glu Pro Glu Pro Gln
35 40 45

Gln Ser Leu Glu Asp Gly Ser Pro Ala Lys Gly Glu Pro Ser Gln Ala 50 55 60

Trp Arg Glu Gln Arg Arg Pro Ser Thr Ser Ser Ala Ser Gly Gln Trp
65 70 75 80

Ser Pro Thr Pro Glu Trp Val Leu Ser Trp Lys Ser Lys Leu Pro Leu

85 90 95

Gln Thr lle Met Arg Leu Leu Gln Val Leu Val Pro Gln Val Glu Lys 100 105 110

He Cys lle Asp Lys Gly Leu Thr Asp Glu Ser Glu Ile Leu Arg Phe

 Leu
 G1n
 His
 G1y
 Thr
 Leu
 Val
 G1y
 Leu
 Leu
 Pro
 Val
 Pro
 His
 Pro
 Ile

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<210> 3378

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3378

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Met Lys Pro His Lys Ser Leu Ala Arg His Ile Ile Pro Val Leu 5 15 Leu Ser Arg Lys Leu Ser Glu Arg Asp Tyr Arg Asn Cys Pro Gly His 20 25 Pro Ala Gly Lys Trp Arg Ile Gln Val Ser Thr Pro Gly Pro Ala Pro 40 45 Ala Tyr Phe Leu Phe Ser Met Cys Glu lle Gln Cys Tyr Pro Val Ser 50 55 Glu Ser Ser Val Arg Cys Gly Ser Cys His Pro Phe Leu Trp Pro Cys 70 75 Ser Leu Arg Leu Phe Lys Leu Leu Leu Ser Arg Thr Leu Phe His 85 90 lle Ser Gln Pro Leu Asn Cys Leu Asn Gly Pro Arg Cys Leu Arg Pro 100 105 The Thr Ser Gly His Ala Lys Val Gly Phe Ala Val Pro Arg Arg Asp 120

Cys Ser Ala Gln Pro Arg Leu Pro Phe Pro Leu Pro Val Pro Ile Leu

Pro Cys Thr 11e Cys Pro Leu His Gly Gln Gly Arg Gly Pro Ser Gly

140

Leu Phe Ala Gln Lys lle <210> 3379 <211> 538 <212> PRT <213> Homo sapiens <400> 3379 Met Gly Leu Leu Leu Val Leu Ile Leu Thr Pro Ser Leu Ala Ala Tyr Arg His Pro Asp Phe Pro Leu Leu Glu Lys Ala Gln Gln Leu Leu Gln Ser Thr Gly Ser Pro Tyr Ser Thr Asn Cys Trp Leu Cys Thr Ser Ser Ser Thr Glu Thr Pro Gly Thr Ala Tyr Pro Ala Ser Pro Arg Glu Trp Thr Ser lle Glu Ala Glu Leu His lle Ser Tyr Arg Trp Asp Pro Asn Leu Lys Gly Leu Met Arg Pro Ala Asn Ser Leu Leu Ser Thr Val Lys Gln Asp Phe Pro Asp Ile Arg Gln Lys Pro Pro Ile Phe Gly Pro lle Phe Thr Asn Ile Asn Leu Met Gly Ile Ala Pro lle Cys Val Met Ala Lys Arg Lys Asn Gly Thr Asn Val Gly Thr Leu Pro Ser Thr Val Cys Asn Val Thr Phe Thr Val Asp Ser Asn Gln Gln Thr Tyr Gln Thr Tyr Thr His Asn Gln Phe Arg His Gln Pro Arg Phe Pro Lys Pro Pro

Asn Ile Thr Phe Pro Gln Gly Thr Leu Leu Asp Lys Ser Ser Arg Phe

Cys	GIN	бГу	Arg	Pro	Ser	5er	Cys	Ser	ınr	Arg	Asn	Phe	Trp	Phe	Arg
		195					200					205			
Pro	Ala	Asp	Tyr	Asn	Gln	Cys	Leu	Gln	He	Ser	Asn	Leu	Ser	Ser	Thr
	210					215					220				
Ala	Glu	Trp	Val	Leu	Leu	Asp	Gln	Thr	Arg	Asn	Ser	Leu	Phe	Trp	Glu
225					230					235					240
Asn	Lys	Thr	Lys	Gly	Ala	Asn	Gln	Ser	Gln	Thr	Pro	Cys	Val	Gln	Val
				245					250					255	
Leu	Ala	Gly	Met	Thr	lle	Ala	Thr	Ser	Tyr	Leu	Gly	lle	Ser	Ala	Val
			260					265					270		
Ser	Glu	Phe	Phe	Gly	Thr	Ser	Leu	Thr	Pro	Leu	Phe	His	Phe	His	Ile
		275					280					285			
Ser	Thr	Cys	Leu	Lys	Thr	Gln	Gly	Ala	Phe	Tyr	He	Cys	Gly	Gln	Ser
	290					295					300				
He	His	Gln	Cys	Leu	Pro	Ser	Asn	Trp	Thr	Gly	Thr	Cys	Thr	11e	Gly
305					310					315					320
Tyr	Val	Thr	Pro	Asp	lle	Phe	He	Ala	Pro	Gly	Asn	Leu	Ser	Leu	Pro
				325					330					335	
He	Pro	lle	Tyr	Gly	Asn	Ser	Pro	Leu	Pro	Arg	Val	Arg	Arg	Ala	He
			340					345					350		
His	Phe	lle	Pro	Leu	Leu	Ala	Gly	Leu	Gly	He	Leu	Ala	Gly	Thr	Gly
		355					360					365			
Thr	Gly	He	Ala	Gly	lle	Thr	Lys	Ala	Ser	Leu	Thr	Tyr	Ser	Gln	Leu
	370					375					380				
Ser	Lys	Glu	11e	Ala	Asn	Asn	He	Asp	Thr	Met	Ala	Lys	Ala	Leu	Thr
385					390					395					400
Thr	Met	Gln	Glu	Gln	He	Asp	Ser	Leu	Ala	Ala	Val	Val	Leu	Gln	Asn
				405					410					415	
Arg	Arg	Gly	Leu	Asp	Met	Leu	Thr	Ala	Ala	G]n	Gly	Gly	He	Cys	Leu
			420					425					430		
Ala	Leu	Asp	Glu	Lys	Cys	Cys	Phe	Trp	Val	Asn	Gln	Ser	G] y	Lys	Val
		435					440					445			
Gln	Asp	Asn	He	Arg	Gln	Leu	Leu	Asn	Gln	Ala	Ser	Ser	Leu	Arg	Glu
	450					455					460				
Arg	Ala	Thr	Gln	Gly	Trp	Leu	Asn	Trp	Glu	Gly	Thr	Trp	Lys	Trp	Phe
465					470					175					480

 Ser
 Trp
 Val
 Leu
 Pro
 Leu
 Thr
 Gly
 Pro
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 Val
 Ser
 Leu
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 Ser
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 Phe

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<210> 3380

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3380

Met Ala Thr Thr Ile Ser Lys Leu Lys Val Asp Leu Asp Phe Asp Ser

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Ser Ser Ile Ser Gln Ile His Leu Val Leu Phe Gly Phe Gln Asp Ala 20 25 30

Val Asn Lys Ile Leu Arg Asn His Leu Ile Arg Pro Ilis Trp Met Phe 35 40 45

Ala Met Asp Asn lle lle Arg Arg Ala Val Gln Ala Ala Val Thr lle 50 55 60

Leu lle Pro Glu Leu Arg Ala His Phe Glu Pro Thr Cys Glu Thr Glu
65 70 75 80

Gly Val Asp Lys Asp Met Asp Glu Ala Glu Glu Gly Tyr Pro Pro Ala 85 90 95

Thr Gly Pro Gly Gln Glu Ala Gln Pro His Gln Gln His Leu Ser Leu 100 105 110

Gln Leu Gly Glu Leu Arg Gln Glu Thr Asn Arg Leu Leu Glu His Leu 115 120 125

Val Glu Lys Glu Arg Glu Tyr Gln Asn Leu Leu Arg Gln Thr Leu Glu 130 135 140

Gln Lys Thr Gln Glu Leu Tyr His Leu Gln Leu Lys Leu Lys Ser Asn 145 150 155 160 Cys lle Thr Glu Asn Pro Ala Gly Pro Tyr Gly Gln Arg Thr Asp Lys Glu Leu Ile Gly Trp Leu Arg Leu Gln Gly Ala Asp Ala Lys Thr Ile Glu Lys Ile Val Glu Glu Gly Tyr Thr Leu Ser Asp lle Leu Asn Glu Ile Thr Lys Glu Asp Leu Arg Tyr Leu Arg Leu Arg Gly Gly Leu Leu Cys Arg Leu Trp Ser Ala Val Ser Gln Tyr Arg Arg Ala Gln Glu Ala Ser Glu Thr Lys Asp Lys Ala

<210> 3381

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3381

Met Glu Glu Val Arg Glu Gly His Ala Leu Gly Gly Gly Met Glu Ala Asp Gly Pro Ala Ser Leu Gln Glu Leu Pro Pro Ser Pro Arg Ser Pro Ser Pro Pro Pro Ser Pro Pro Pro Leu Pro Ser Pro Pro Ser Leu Pro Ser Pro Ala Ala Pro Glu Ala Pro Glu Leu Pro Glu Pro Ala Gln Pro Ser Glu Ala His Ala Arg Gln Leu Leu Leu Glu Glu Trp Gly Pro Leu Ser Gly Gly Leu Glu Leu Pro Gln Arg Leu Thr Trp Lys Leu Leu Leu Leu Arg Arg Pro Leu Tyr Arg Asn Leu Leu Arg Ser Pro Asn Pro Glu Gly lle Asn lle Tyr Glu Pro Ala Pro Pro Thr Gly Pro Thr Gln Arg

Pro Leu Glu Thr Leu Gly Asn Phe Arg Gly Trp Tyr lle Arg Thr Glu 135 Lys Leu Gln Gln Asn Gln Ser Trp Thr Val Lys Gln Gln Cys Val Asp 145 150 155 160 Leu Leu Ala Glu Gly Leu Trp Glu Glu Leu Leu Asp Asp Glu Gln Pro 170 165 Ala lle Thr Val Met Asp Trp Phe Glu Asp Ser Arg Leu Asp Ala Cys 185 Val Tyr Glu Leu His Val Trp Leu Leu Ala Ala Asp Arg Arg Thr Val 200 205 Ile Ala Gln His His Val Ala Pro Arg Thr Ser Gly Arg Gly Pro Pro 215 Gly Arg Trp Val Gln Val Ser His Val Phe Arg His Tyr Gly Pro Gly 225 230 235 240 Val Arg Phe Ile His Phe Leu His Lys Ala Lys Asn Arg Met Glu Pro 245 250 Gly Gly Leu Arg Arg Thr Arg Val Thr Asp Ser Ser Val Ser Val Gln 265 270 Leu Arg Glu 275 ⟨210⟩ 3382 <211> 452 <212> PRT <213> Homo sapiens

 Met Lys
 Val
 Gln
 Pro
 Ser
 Val
 Thr
 Cys
 Val
 Ala
 Ser
 Trp
 Gly
 Gly
 Ile

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 15
 15
 15

 Val
 His
 Leu
 Glu
 Ala
 Phe
 Gly
 Asp
 Pro
 Val
 Ile
 Val
 Leu
 Arg
 Gly
 Ala

 Trp
 Ala
 Val
 Pro
 Arg
 Val
 Asp
 Cys
 Leu
 Ile
 Asp
 Thr
 Leu
 Arg
 Thr
 Pro

 Asn
 Ala
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 Cys
 Met
 Arg
 Lys
 Gly
 Thr
 His
 Leu
 Val
 Pro
 Cys
 Leu

 50
 55
 60
 Fro
 Fro
 Cys
 Leu
 Arg
 Fro
 Cys
 Leu
 Arg
 Cys
 Leu
 Cys
 Leu
 Cys
 Leu
 Cys

⟨400⟩ 3382

Glu	Glu	GIu	Glu	Leu	Ala	Leu	His	Arg	Arg	Arg	Leu	Asp	Met	Ser	GJu
65					70					75					80
Ala	Leu	Pro	Cys	Pro	Gly	Lys	Glu	Thr	Pro	Thr	Pro	Gly	Cys	Arg	Leu
				85					90					95	
Gly	Ala	Leu	Tyr	Trp	Λla	Cys	Val	His	Asn	Asp	Pro	Thr	Gln	Leu	Gln
			100					105					110		
Ala	He	Leu	Asp	Gly	$\operatorname{Gl} y$	Val	Ser	Pro	Glu	Glu	Лlа	Thr	Gln	Val	Asp
		115					120					125			
Ser	Asn	Gly	Arg	Thr	Gly	Leu	Met	Val	Ala	Cys	Phe	His	Gly	Phe	Gln
	130					135					140				
Ser	Val	Val	Ala	Leu	Leu	Ser	His	Cys	Pro	Phe	Leu	Asp	Val	Asn	Gln
145					150					155					160
Gln	Asp	Lys	Gly	Gly	Asp	Thr	Ala	Leu	Met	Leu	Ala	Ala	Gln	Ala	Gly
				165					170					175	
His	Val	Pro	Leu	Val	Ser	Leu	Leu	Leu	Asn	Tyr	Tyr	Val	Gly	Leu	Asp
			180				٠	185					190		
Leu	Glu	Arg	Arg	Asp	Gln	Arg	Gly	Leu	Thr	Ala	Leu	Met	Lys	Ala	Ala
		195					200					205			
Met	Arg	Asn	Arg	Cys	Ala	Asp	Leu	Thr	Ala	Val	Asp	Pro	Val	Arg	Gly
	210					215					220				
Lys	Thr	Ala	Leu	Glu	Trp	Ala	Val	Leu	Thr	Asp	Ser	Phe	Asp	Thr	Val
225					230					235					240
Trp	Arg	lle	Arg	Gln	Leu	Leu	Arg	Arg	Pro	Gln	Val	Glu	Gln	Leu	Ser
				245					250					255	
Arg	His	Tyr	Lys	Pro	Glu	Trp	Pro	Ala	Leu	Ser	Gly	Leu	Val	Ala	Gln
			260					265					270		
Ala	Gln	Ala	Gln	Ala	Gln	Val	Ala	Pro	Ser	Leu	Leu	Glu	Arg	Leu	Gln
		275					280					285			
Ala	Thr	Leu	Ser	Leu	Pro	Phe	Ala	Pro	Ser	Pro	Gln	Glu	Gly	G1 y	Va]
	290		•			295					300				
Leu	Asp	His	Leu	Val	Thr	Ala	Thr	Thr	Ser	Leu	Ala	Ser	Pro	Phe	Val
305					310					315					320
Thr	Thr	Ala	Cys		Thr	Leu	Cys	Pro		His	Pro	Pro	Ser		Gly
				325					330					335	
Thr	Arg	Ser	-	Ser	Val	Pro	Glu		Leu	Gly	Thr	Ala	Pro	Pro	Pro
			340					345					350		

Pro Leu Val Pro Gln Ser Pro Pro Gly Ser Pro Gln Arg Ser Pro Trp Val Phe Val Pro Tyr Gln Ser Pro Gln Gly Ile Leu Ser Lys Cys Leu Gln Trp Leu Gln Pro Arg Asp Ser Thr Ser Pro Arg Pro Gln Val Pro Lys Ile Leu Leu Ser Lys Ala Ser Ser Ser Ser His Gln Cys Gln Pro Lys Pro Ser Pro Ser Gly His Gln Ser Leu Ala Leu Pro Leu Trp Arg Tyr Gln Glu Leu Arg Ile Glu Lys Arg Lys Gln Glu Glu Glu Ala Arg Met Ala Gln Lys

<210> 3383

<211> 409

<212> PRT

<213> Homo sapiens

<400> 3383

Met Val Glu Leu Phe 11e Phe Leu Phe Leu Leu Gly Glu Thr Pro Phe Lys Val Val Val Lys Ser Leu Ser Pro Lys Glu Leu Val Arg Ile His Val Pro Lys Pro Leu Asp Arg Asn Asp Gly Thr Phe Leu Met Arg Tyr Arg Met Tyr Glu Thr Val Asp Glu Gly Leu Lys 11e Glu Val Leu Tyr Gly Asp Glu His Val Ala Gln Ser Pro Tyr lle Leu Lys Gly Pro Val Tyr His Glu Tyr Cys Glu Cys Pro Glu Asp Pro Gln Ala Trp Gln Lys Thr Leu Ser Cys Pro Thr Lys Glu Pro Gln lle Ala Lys Asp Phe Ala

Ser	Phe	Pro	Ser	He	Asn	Leu	Gln	Gln	Met	Leu	Lys	Glu	Val	Pro	Lys
		115					120					125			
Arg	Phe	Gly	Asp	Glu	Arg	Gly	Ala	11e	Val	His	Tyr	Thr	lle	Leu	Asn
	130					135					140				
Asn	His	Val	Tyr	Arg	Arg	Ser	Leu	Gly	Lys	Tyr	Thr	Asp	Phe	Lys	Met
145					150					155					160
Phe	Ser	Asp	Glu	lle	Leu	Leu	Ser	Leu	Thr	Arg	Lys	Val	Leu	Leu	Pro
				165					170					175	
Asp	Leu	Glu	Phe	Tyr	Val	Asn	Leu	Gly	Asp	Trp	Pro	Leu	Glu	His	Arg
			180					185					190		
Lys	Val	Asn	Gly	Thr	Pro	Ser	Pro	lle	Pro	lle	Ile	Ser	Trp	Cys	Gly
		195					200					205			
Ser	Leu	Asp	Ser	Arg	Asp	Val	Val	Leu	Pro	Thr	Tyr	Asp	lle	Thr	His
	210					215					220				
Ser	Met	Leu	Glu	Ala	Met	Arg	Gly	Va]	Thr	Asn	Asp	Leu	Leu	Ser	Пе
225					230					235					240
Gln	Gly	Λsn	Thr	Gly	Pro	Ser	Trp	lle	Asn	Lys	Thr	Glu	Arg	Ala	Phe
				245					250					255	
Phe	Arg	Gly	Arg	Asp	Ser	Arg	Glu	Glu	Arg	Leu	Gln	Leu	Val	Gln	Leu
			260					265					270		
Ser	Lys	Glu	Asn	Pro	Gln	Leu	Leu	Asp	Ala	Gly	He	Thr	Gly	Tyr	Phe
		275					280					285			
Phe	Phe	Gln	Glu	Lys	Glu	Lys	Glu	Leu	Gly	Lys	Ala	Lys	Leu	Met	Gly
	290					295					300				
Phe	Phe	Asp	Phe	Phe	Lys	Tyr	Lys	Tyr	Gln	Val	Asn	Val	Asp	Gly	Thr
305					310					315					320
Val	Ala	Ala	Tyr	Arg	Tyr	Pro	Tyr	Leu	Met	Leu	Gly	Asp	Ser	Leu	Val
				325					330					335	
Leu	Lys	Gln	Asp	Ser	Pro	Tyr	Tyr	Glu	His	Phe	Tyr	Met	Ala	Leu	Glu
			340					345					350		
Pro	Trp	Lys	His	Tyr	Val	Pro	lle	Lys	Arg	Asn	Leu	Ser	Asp	Leu	Leu
		355					360					365			
Glu	Lys	Val	Lys	Trp	Ala	Lys	Ser	Phe	Thr	Leu	Ser	Pro	Arg	Leu	Glu
	370					375					380				
Cys	Ser	Gly	Thr	11e	Ser	Thr	His	Cys	Asn	Leu	Cys	Leu	Pro	Gly	Ser
385					390					395					400

Arg Asn Phe Val Pro Gln Pro Pro Glu
405

<210> 3384

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3384

Met Arg Lys Pro Arg Glu Met Arg Gly Leu Ala Gln Gly Arg Gly Val

1 5 10 15

His Ser Gln Leu Cys Leu Leu Leu Thr Gln Asn Lys Asp Leu Gly Thr
20 25 30

Pro Arg Gly Ser Trp Pro Ser Gly Met Asp Ser Trp His Leu Arg Ala 35 40 45

Ser Arg Leu Gln Pro Ser Gly Ser His Gly Cys Pro Lys Ser Ser Gly 50 55 60

Pro Leu Leu Gly Ser Trp Leu Gly Cys Leu Ala Leu Pro Asp Arg Arg
65 70 75 80

Leu Leu Gly Ser Cys Leu Leu Gly Asp Ala Ser Cys Arg Ser Trp Cys
85 90 95

Gly Gly Gln Gly Gly Gly Phe Phe Leu Ser Leu Ser Leu Ser 100 105

Ser Thr Phe Ser Pro Leu Pro Arg Gly Asn Gly Ser Arg 11e Ser Phe 115 120 125

Lys Arg Met Leu Leu Tyr Phe Ala Ser Gly Trp Lys Val Ala Val Leu 130 135 140

Ala Pro Val Ser Cys Thr Trp Thr Pro Val

145 150

<210> 3385

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3385 Met Val His Ala Cys Gln Val Ser Ser Glu Cys Ser Gly Cys Leu Arg 1 5 10 15 Gly Gly Glu Glu Gly Met Pro Trp Leu Leu Pro Pro Leu Cys His His 25 Leu Pro Ala His Leu Gly Leu Lys Ser Val Trp Thr Ala Glu Ser Val 45 Ser Glu Lys Pro Val Leu Gly Gln Glu Leu Gly Asn Arg Ala Val Lys Glu Val Gln Ser Gly Glu Glu Arg Arg Lys Leu Asp Leu Gly Thr Asp 70 75 Arg Ile Pro Gln Ala Cys Ser Thr Ser Gln Pro Leu Tyr Ala Pro Thr 85 90 95 Leu Gly Leu Trp Thr Gly Phe Met Phe Cys Leu Ile Ser Val Pro Glu 100 105 110 Ala Glu Met Gly Met Val Glu Arg Ser Ser Thr Gln Val Ala Pro Gly 120 115 Met Gly Met Ser Thr Pro Tyr Ser Pro Cys Val Ser Ser 130 135 140

<210> 3386

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3386

Met Val Glu Leu Ala Lys Tyr Ala Lys Gln His Val Pro Glu Gln His

1 5 10 15

Pro Lys Asp Lys Pro Ser Phe Val Arg Ala Arg Val Lys Lys Leu Leu
20 25 30

Ala Ala Gly Val Val Ser Ala Met Val Cys Met Val Lys Thr Glu Ser
35 40 45

Pro Val Leu Thr Ser Ser Cys Arg Glu Leu Leu Ser Arg Val Phe Leu

50 55 60

Ala	Leu	Val	Glu	Glu	Val	Glu	Asp	Arg	Gly	Thr	Val	Val	Ala	G]n	Gly	
65					70					75					80	
G1 y	Gly	Arg	Ala	Leu	He	Pro	Leu	Λla	Leu	Glu	Gly	Thr	Asp	Val	Gly	
				85					90					95		
Gln	Thr	Lys	Ala	Ala	Gln	Ala	Leu	Ala	Lys	Leu	Thr	Tle	Thr	Ser	Asn	
			100					105					110			
Pro	Glu	Met	Thr	Phe	Pro	Gly	Glu	Arg	He	Tyr	Glu	Val	Val	Arg	Pro	
		115					120-					125				
Leu	Val	Ser	Leu	Leu	His	Leu	Asn	Cys	Ser	Gly	Leu	Gln	Asn	Phe	Glu	
	130					135					140					
Ala	Leu	Met	Ala	Leu	Thr	Asn	Leu	Ala	Gly	lle	Ser	Glu	Arg	Leu	Arg	
145					150					155					160	
Gln	Lys	He	Leu	Lys	Glu	Lys	Ala	Val	Pro	Met	He	Glu	Gly	Tyr	Met	
				165					170					175		
Phe	Glu	Glu	His	Glu	Met	lle	Arg	Arg	Ala	Ala	Thr	Glu	Cys	Met	Cys	
			180					185					190			
Asn	Leu	Ala	Met	Ser	Lys	Glu	Val	Gln	Asp	Leu	Phe	Glu	Ala	Gln	Gly	
		195					200					205				
Asn	Asp	Arg	Leu	Lys	Leu	Leu	Val	Leu	Tyr	Ser	Gly	Glu	Asp	Asp	Glu	
	210					215					220					
Leu	Leu	Gln	Arg	Ala	Ala	Ala	G1 y	Gly	Leu	Ala	Met	Leu	Thr	Ser	Met	
225					230					235					240	
Arg	Pro	Thr	Leu	Cys	Ser	Arg	11e	Pro	Gln	Val	Thr	Thr	His	Trp	Leu	
				245					250					255		
Glu	He	Leu	GIn	Ala	Leu	Leu	Leu	Ser	Ser	Asn	GIn	Glu	Leu	Gln	His	
			260					265					270			
Arg	Gly	Ala	Va]	Val	Val	Leu	Asn	Met	Val	Glu	Ala		Arg	Glu	He	
		275					280					285				
Ala		Thr	Leu	Met	Glu	Ser	G] u	Met	Met	Glu	He	Leu	Ser	Va]	Leu	
	290					295					300					
	Lys	Gly	Asp	His		Pro	Val	Thr	Arg		Ala	Ala	Ala	Cys		•
305					310					315					320	
Asp	Lys	Ala	Val		Tyr	Gly	Leu	He		Pro	Asn	Gln	Asp		G] u	
				325					330					335		

<210> 3387

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<211> 1088
<212> PRT
<213> Homo sapiens
<400> 3387
Met Ala Asn Gly Thr Ala Asp Val Arg Lys Leu Phe lle Phe Thr Thr
                                      10
Thr Gln Asn Tyr Phe Gly Leu Met Ser Glu Leu Trp Asp Gln Pro Leu
                                  25
                                                      30
             20
Leu Cys Asn Cys Leu Glu Ile Asn Asn Phe Leu Asp Asp Gly Asn Gln
                             40
                                                  45
Met Leu Leu Arg Val Gln Arg Ser Asp Ala Gly Ile Ser Phe Ser Asn
     50
                         55
                                              60
Thr lle Glu Phe Gly Asp Thr Lys Asp Lys Val Leu Val Phe Phe Lys
                     70
                                          75
 65
Leu Arg Pro Glu Val Ile Thr Asp Glu Asn Leu His Asp Asn Ile Leu
                                      90
Val Ser Ser Met Leu Glu Ser Pro Ile Ser Ser Leu Tyr Gln Ala Val
            100
                                 105
                                                     110
Arg Gln Val Phe Ala Pro Met Leu Leu Lys Asp Gln Glu Trp Ser Arg
                                                 125
                            120
Asn Phe Asp Pro Lys Leu Gln Asn Leu Leu Ser Glu Leu Glu Ala Gly
    130
                        135
                                             140
Leu Gly Ile Val Leu Arg Arg Ser Asp Thr Asn Leu Thr Lys Leu Lys
                    150
                                         155
Phe Lys Glu Asp Asp Thr Arg Gly Ile Leu Thr Pro Ser Asp Glu Phe
                                     170
Gln Phe Trp Ile Glu Gln Ala His Arg Gly Asn Łys Gln Ile Ser Lys
                                                     190
            180
                                 185
Glu Arg Ala Asn Tyr Phe Lys Glu Leu Phe Glu Thr 11e Ala Arg Glu
                            200
                                                 205
Phe Tyr Asn Leu Asp Ser Leu Ser Leu Leu Glu Val Val Asp Leu Val
    210
                        215
                                             220
Glu Thr Thr Gln Asp Val Val Asp Asp Val Trp Arg Gln Thr Glu His
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Asp	His	Tyr	Pro	Glu	Ser	Arg	Met	Leu	His	Leu	Leu	Asp	He	11e	G1 y
				245					250					255	
Gly	Ser	Phe	Gly	Arg	Phe	Val	Gln	Lys	Lys	Leu	Gly	Thr	Leu	Asn	Leu
			260					265					270	•	
Trp	Glu	Asp	Pro	Tyr	Tyr	Leu	Val	Lys	Glu	Ser	Leu	Lys	Ala	Gly	He
		275					280					285			
Ser	He	Cys	Glu	Gln	Trp	Va]	He	Val	Cys	Asn	His	Leu	Thr	Gly	Gln
	290					295					300				
Val	Trp	Gln	Arg	Tyr	Val	Pro	His	Pro	Trp	Lys	Asn	Glu	Lys	Tyr	Phe
305					310					315					320
Pro	G]u	Thr	Leu	Asp	Lys	Leu	Gly	Lys	Arg	Leu	Glu	Glu	Va]	Leu	Ala
				325					330					335	
Пе	Arg	Thr	lle	His	Glu	Lys	Phe	Leu	Tyr	Phe	Leu	Pro	Ala	Ser	Glu
			340					345					350		
Glu	Lys	He	He	Cys	Leu	Thr	Arg	Val	Phe	Glu	Pro	Phe	Thr	Gly	Leu
		355					360					365			
Asn	Pro	Val	Gln	Tyr	Asn	Pro	Tyr	Thr	Glu	Pro	Leu	Trp	Lys	Ala	Ala
	370					375					380			·	
Val	Ser	Gln	Tyr	Glu	Lys	lle	He	Ala	Pro	Ala	Glu	Gln	Lys	11e	Ala
385					390					395					400
Gly	Lys	Leu	Lys	Asn	Tyr	He	Ser	Glu	lle	Gln	Asp	Ser	Pro	Gln	Gln
				405					410					415	
Leu	Leu	GIn	Ala	Phe	Leu	Lys	Tyr	Lys	Glu	Leu	Val	Lys	Arg	Pro	Thr
			420					425					430		
He	Ser	Lys	Glu	Leu	Met	Leu	Glu	Arg	Glu	Thr	Leu	Leu	Ala	Arg	Leu
		435					440					445			
Val	Asp	Ser	lle	Lys	Asp	Phe	Arg	Leu	Asp	Phe	Glu	Asn	Arg	Cys	Arg
	450			•		455					460				
Gly	He	Pro	Gly	Asp	Ala	Ser	Gly	Pro	Leu	Ser	Gly	Lys	Asn	Leu	Ser
465					470					475					480
Glu	Val	Val	Asn	Ser	He	Val	Trp	Val	Arg	Gln	Leu	Glu	Leu	Lys	Val
				485					490					495	
Asp	Asp	Thr	He	Lys	He	Ala	Glu	Ala	Leu	Leu	Ser	Asp	Leu	Pro	Gly
			500					505					510		
Phe	Arg	Cys	Phe	llis	Gln	Ser	Ala	Lys	Asp	Leu	Leu	Asp	Gln	Leu	Lys
		515					520					525			

Leu	Tyr	Glu	Gln	Glu	Gln	Phe	Asp	Asp	Trp	Ser	Arg	Asp	He	Gln	Ser
	530					535					540				
Gly	Leu	Ser	Asp	Ser	Arg	Ser	Gly	Leu	Cys	lle	Glu	Ala	Ser	Ser	Arg
545					550					555					560
He	Met	Glu	Leu	Asp	Ser	Asn	Asp	G1 y	Leu	Leu	Lys	Val	His	Tyr	Ser
				565					570				•	575	
Asp	Arg	Leu	Va]	He	Leu	Leu	Arg	Glu	Val	Arg	Gln	Leu	Ser	Ala	Leu
			580					585					590		
Gly	Phe	Val	He	Pro	Ala	Lys	He	Gln	Gln	Val	Ala	Asn	Ile	Ala	Gln
		595					600					605			
Lys	Phe	Cys	Lys	Gln	Ala	lle	lle	Leu	Lys	Gln	Val	Ala	His	Phe	Tyr
	610					615					620				
Asn	Ser	11e	Asp	Gln	GIn	Met	11e	Gln	Ser	Gln	Arg	Pro	Met	Met	Leu
625					630					635					640
Gln	Ser	Ala	Leu	Ala	Phe	Glu	Gln	He	Пе	Lys	Asn	Ser	Lys	Ala	G1 y
				645					650					655	
Ser	Gly	Gly	Lys	Ser	Gln	He	Thr	Trp	Asp	Asn	Pro	Lys	Glu	Leu	Glu
			660					665					670		
G1 y	Tyr	He	G1n	Lys	Leu	Gln	Asn	Ala	Ala	Glu	Arg	Leu	Ala	Thr	Glu
		675					680					685			
Asn	Arg	Lys	Leu	Arg	Lys	Trp	His	Thr	Thr	Phe	Cys	Glu	Lys	Val	Val
	690					695					700				
Val	Leu	Met	Asn	He	Asp	Leu	Leu	Arg	Gln	Gln	Gln	Arg	Trp	Lys	Asp
705					710					715					720
Gly	Leu	Gln	Glu		Arg	Thr	Gly	Leu		Thr	Val	Glu	Ala		Gly
				725					730					735	
Phe	G1n	Ala		Asp	Met	His	Ala		Lys	Gln	His	Trp		His	Gln
	_		740					745				_	750		
Leu	Tyr		Ala	Leu	Glu	His		Tyr	Gln	Met	Gly		Glu	Ala	Leu
	0.1	755					760				<i>m</i> 1	765		0.1	0.7
Asn		Asn	Leu	Pro	Glu		Asn	He	Asp	Leu		Tyr	Lys	GIn	Gly
	770	C.1	151			775	151	0.1	0.1	7.1	780		,	æ	æ
	Leu	GIn	Phe	Arg	Pro	Pro	Phe	Glu	Glu		Arg	Λla	Lys	Lyr	
785	C 1	14 .			790	7.7	<i>C.</i> 1	7.7	D	795	C1	DI		C1	800
Arg	GJ U	мет	Lys		Phe	11e	61 y	He		Asn	GIn	Phe	Lys		val
				805					810					815	

Gly	Glu	Ala	G1y 820	Asp	Glu	Ser	He	Phe 825	Ser	lle	Met	He	Asp 830	Arg	Asn
A 1 a	Con	C1,,		Lau	Thu	11.	Dho		Luc	A]	C1	A an		Dha	Λ
нла	261		rne	Leu	1 1 1 1	116		261	LyS	Ala	GIU		Leu	rne	Arg
		835					840			0.1		845			0.1
Arg		Ser	Ala	Val	Leu		GIn	H1S	Lys	Glu		He	Val	He	Gly
	850					855					860				
Gln	Va]	Asp	Met	Glu	Ala	Leu	Val	Glu	Lys	llis	Leu	Phe	Thr	Val	His
865					870					875					880
Asp	Trp	Glu	Lys	Asn	Phe	Lys	Ala	Leu	Lys	lle	Lys	Gly	Lys	Glu	Val
				885					890					895	
Glu	Arg	Leu	Pro	Ser	Λla	Val	Lys	Val	Asp	Cys	Leu	Asn	Ile	Asn	Cys
			900					905					910		
Asn	Pro	Val	Lys	Thr	Val]]e	Asp	Asp	Leu	lle	Gln	Lys	Leu	Phe	Asp
		915					920					925			
Leu	Leu	Val	Leu	Ser	Leu	Lys	Lys	Ser	He	Gln	Ala	His	Leu	His	Glu
	930					935					940				
He	Asp	Thr	Phe	Val	Thr	G] u	Ala	Met	Glu	Val	Leu	Thr	Ile	Met	Pro
945					950					955					960
Gln	Ser	Val	Glu	Glu	Ile	Gly	Asp	Ala	Asn	Leu	Gln	Tyr	Ser	Lys	Leu
				965					970					975	
Gln	Glu	Arg	Lys	Pro	Glu	lle	Leu	Pro	Leu	Phe	Gln	Glu	Ala	Glu	Asp
			980					985					990		•
Lvs	Asn	Arg		Leu	Arg	Thr	Val		Glv	Glv	Glv	Leu	Glu	Thr	He
•		995			Ü		1000		. 3	,		1005			
Ser	Asn		Lvs	Ala	Lvs			Lvs	Phe	G1u			Met	Glu	Ser
	1010		.5,0			1015		2,0	• • • •		1020			0.10	
		Len	Met	He			Gln	He	Glu			lvs	Glv	Asn	Val
1025		Lea	inc c		1030	.15p	0111	110		1035	MC C	L , 5	01,		1040
1020	,				10.50					1000				•	1010
Lve	Sor	Ara	Lou	Cln	116	Tyr	Tur	Cln	Clu	Lou	Clu	lve	Dho	Lvc	110
Lys	261	Aig		Gln	116	1 / 1	1 y .1			reu	Glu	Lys			ма
	т	Δ.		1045		rs.	C)		1050	17 1	11	C1		1055	C.I
Arg	rp			Leu	Lys	Pro			Asp	val	116			61 y	Gin
			1060					1065					1070		
His			Leu	Asp	Lys			Lys	Leu	He			Lys	Lys	lle
		1075					1080					1085			

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<211> 352
<212> PRT
<213> Homo sapiens
<400> 3388
Met Leu Leu Pro Asp Asp Phe Lys Ala Ser Ser Lys lle Lys Val Asn
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                                                         15
                                     10
Asn His Leu Phe His Arg Glu Asn Leu Pro Ser His Phe Lys Phe Lys
            20
                                 25
Glu Tyr Cys Pro Gln Val Phe Arg Asn Leu Arg Asp Arg Phe Gly 11e
                            40
                                                 45
Asp Asp Gln Asp Tyr Leu Val Thr Leu Thr Arg Asn Pro Pro Ser Glu
    50
                         55
                                             60
Ser Glu Gly Ser Asp Gly Arg Phe Leu Ile Ser Tyr Asp Arg Thr Leu
                     70
                                         75
Val Ile Lys Glu Val Ser Ser Glu Asp Ile Ala Asp Met His Ser Asn
                 85
                                     90
Leu Ser Asn Tyr His Gln Tyr Ile Val Lys Cys His Gly Asn Thr Leu
            100
                                105
                                                    110
Leu Pro Gln Phe Leu Gly Met Tyr Arg Val Ser Val Asp Asn Glu Asp
                           120
                                                125
Ser Tyr Met Leu Val Met Arg Asn Met Phe Ser His Arg Leu Pro Val
    130
                        135
His Arg Lys Tyr Asp Leu Lys Gly Ser Leu Val Ser Arg Glu Ala Ser
                    150
                                        155
Asp Lys Glu Lys Val Lys Glu Leu Pro Thr Leu Lys Asp Met Asp Phe
                165
                                    170
                                                         175
Leu Asn Lys Asn Gln Lys Val Tyr Ile Gly Glu Glu Glu Lys Lys Ile
            180
                                185
                                                    190
Phe Leu Glu Lys Leu Lys Arg Asp Val Glu Phe Leu Val Gln Leu Lys
                            200
He Met Asp Tyr Ser Leu Leu Gly He His Asp He He Arg Gly
    210
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Ser Glu Pro Glu Glu Glu Ala Pro Val Arg Glu Asp Glu Ser Glu Val

<210> 3388

Asp Gly Asp Cys Ser Leu Thr Gly Pro Pro Ala Leu Val Gly Ser Tyr Gly Thr Ser Pro Glu Gly Ile Gly Gly Tyr Ile His Ser His Arg Pro Leu Gly Pro Gly Glu Phe Glu Ser Phe Ile Asp Val Tyr Ala Ile Arg Ser Ala Glu Gly Ala Pro Gln Lys Glu Val Tyr Phe Met Gly Leu 11e Asp Ile Leu Thr Gln Tyr Asp Ala Lys Lys Lys Ala Ala His Ala Ala Lys Thr Val Lys His Gly Ala Gly Ala Glu Ile Ser Thr Val His Pro Glu Gln Tyr Ala Lys Arg Phe Leu Asp Phe IIe Thr Asn IIe Phe Ala

<210> 3389

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3389

Met Gln Pro Arg Ser Arg Trp Gln Ala Gln Asn Ser Glu Thr Lys Ser His Gly Ala Lys Val Arg His Ala Phe Leu Ala His Leu Cys Val Lys Lys Val Thr Gly Met Leu Thr Thr Gln Val Leu Gly Val Arg Pro Gly Gln Arg Arg Gly Pro Cys Cys Ser Arg 11e Asp Arg Gln Leu Ala Ser Lys Leu Gly Ala Gln Arg Gln Arg Leu Pro IIc His Leu Ser Thr Leu Leu Ser His Leu Phe Pro Lys Asp Asp Pro Lys Ala Leu His Ser Ile

Phe Gln Arg Asp Met Gly Val Glu Gly Met Glu Val Leu Ser His Leu

Leu Leu His Leu Glu Ala Pro Arg Ser Thr Asp Thr Asp His Pro Leu Ser Val Lys Asn Val Leu Phe Gln Glu Ala Pro Gln Leu Arg Leu Lys Glu Thr Ala Pro Pro Pro Gly <210> 3390 <211> 129 <212> PRT <213> Homo sapiens <400> 3390 Met Ala Cys Pro Ser Pro Val Ser Arg Arg Leu Ala Arg Ser Thr Leu Leu Leu Ile Pro Leu Phe Gly Val His Tyr 11e Met Phe Ala Phe Phe Pro Asp Asn Phe Lys Pro Glu Val Lys Met Val Phe Glu Leu Val Val Gly Ser Phe Gln Gly Phe Val Val Ala Ile Leu Tyr Cys Phe Leu Asn Gly Glu Val Gln Ala Glu Leu Arg Arg Lys Trp Arg Arg Trp His Leu Gln Gly Val Leu Gly Trp Asn Pro Lys Tyr Arg His Pro Ser Gly Gly Ser Asn Gly Ala Thr Cys Ser Thr Gln Val Ser Met Leu Thr Arg Val Ser Pro Gly Ala Arg Arg Ser Ser Ser Phe Gln Ala Glu Val Ser Leu

Val

<211> 136 <212> PRT <213> Homo sapiens <400> 3391 Met Gly Met Lys Arg Glu His Phe Cys Tyr Leu Pro Asn Ser Trp Glu Pro Val Asp Ser Leu His Pro His Ala Pro Gly Leu Ala Ala Thr Gly 20 Leu Val Cys Val Ser Ser Met Cys Leu Phe Trp His Ile Ser Lys Val 40 Arg Tyr Ala Val Cys Gly Leu Val Ser Leu Ala Pro Phe Ala Glu His 55 60 Asn Val Phe Glu Val His Pro Phe Arg Ser Phe Glu Gly Cys Val Ala 65 70 75 80 Phe His Gly Val Ala Ile His Ser Cys Ala Tyr Gly Arg Leu Asp Cys 90 Val Gln Phe Leu Ala Thr Leu Asn Lys Ala Ser Val Asn Met Asp Ser 100 105 110 Leu Val Leu Glu Arg Met Tyr Val Leu Ser Leu Leu Cys Arg Cys Leu 115 120 125 Gly Val Asp Cys Trp Val Met Trp 130 135 ⟨210⟩ 3392 <211> 235 <212> PRT <213> Homo sapiens

<400> 3392

 Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe

 1
 5

 Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile

 20
 25

 30

 Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly

		35					40					45			
Glu	Arg	Pro	Val	Leu	Lys	Ala	Pro	Val	Pro	Lys	Arg	Gln	Lys	Cys	Asp
	50					55					60				
His	Trp	Thr	Pro	Cys	Pro	Ser	Asp	Thr	Tyr	Ala	Tyr	Arg	Leu	Leu	Ser
65					70					75					80
Gly	Gly	Gly	Arg	Ser	Lys	Tyr	Ala	Lys	He	Cys	Phe	Glu	Asp	Asn	Leu
				85					90					95	
Leu	Met	Gly	Glu	Gln	Leu	Gly	Asn	Val	Ala	Arg	Gly	lle	Asn	He	Ala
			100					105					110		
Ile	Val	Asn	Tyr	Val	Thr	Gly	Asn	Val	Thr	Ala	Thr	Arg	Cys	Phe	Asp
		115					120					125			
Met	Tyr	Glu	Gly	Asp	Asn	Ser	Gly	Pro	Met	Thr	Lys	Phe	He	Gln	Ser
	130					135					140				
Ala	Ala	Pro	Lys	Ser	Leu	Leu	Phe	Met	Val	Thr	Tyr	Λsp	Asp	Gly	Ser
145					150					155					160
Thr	Arg	Leu	Asn	Asn	Asp	Ala	Lys	Asn	Ala	He	Glu	Ala	Leu	Gly	Ser
				165					170					175	
Lys	Glu	Ile	Arg	Asn	Met	Lys	Phe	Arg	Ser	Ser	Trp	Va]	Phe	Ile	Ala
			180					185					190		
Ala	Lys	Gly	Leu	Glu	Leu	Pro	Ser	Glu	lle	Gln	Arg	Glu	Lys	lle	Asr
		195					200					205			
His	Ser	Asp	Ala	Lys	Asn	Asn	Arg	Tyr	Ser	Gly	Trp	Pro	Ala	Glu	Пе
	210					215					220				
Gln	Ile	Glu	Gly	Cys	lle	Pro	Lys	Glu	Arg	Ser					
225					230					235					

<210> 3393

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3393

Met Cys Ala Gln Asn Tyr Val Val Leu Leu Asp Ser Thr Leu Pro Arg

1 5 10 15

Ser Gln Tyr Asp Tyr 11e Leu Pro Gln Val Ser Phe Thr Ala Val Gly

Tyr His Lys His Ile Thr Leu Ile Phe Asn Pro Thr Arg Lys Leu Pro Glu Gln Asp lle Ala Gln Gly Ser Tyr lle Ala Leu Pro Leu Thr Leu Leu Val Leu Leu Ala Gly Tyr Asn His Asp Lys Leu Ile Pro Leu Leu Leu Gln Leu Thr Ser Arg Leu Gln Gly Val Arg Ala Leu Gly Gln Ala Ala Ser Asp Asn Ser Gly Pro Glu Asp Ala Lys Arg Gln Ala Lys Lys Gln Lys Thr Arg Arg Thr <210> 3394 <211> 548 <212> PRT <213> Homo sapiens <400> 3394 Met His Arg Leu Lys Cys Met Val Lys Ala Phe Phe Leu Thr Phe Cys Gln Val Ser Ser Glu Asp Arg Ser Ala Leu Trp Ala Leu Val Thr Phe Tyr Gly Gly Asp Cys Gln Leu Thr Leu Asn Lys Lys Cys Thr His Leu lle Val Pro Glu Pro Lys Gly Glu Lys Tyr Glu Cys Ala Leu Lys Arg Ala Ser Ile Lys Ile Val Thr Pro Asp Trp Val Leu Asp Cys Val Ser Glu Lys Thr Lys Lys Asp Glu Ala Phe Tyr His Pro Arg Leu Ile Ile

Glu Glu Gln Asp Ser Gln Asn Glu Gly Ser Thr Asp Glu Lys Ser Ser

		115					120					125			
Pro	Ala	Ser	Ser	Gln	Glu	Gly	Ser	Pro	Ser	G1 y	Asp	Gln	Gln	Phe	Ser
	130					135					140				
Pro	Lys	Ser	Asn	Thr	Glu	Lys	Ser	Lys	Gly	Glu	Leu	Met	Phe	Asp	Asp
145					150					155					160
Ser	Ser	Asp	Ser	Ser	Pro	Glu	Lys	Gln	Glu	Arg	Asn	Leu	Asn	Trp	Thr
				165					170					175	
Pro	Ala	Glu	Val	Pro	Gln	Leu	Ala	Ala	Ala	Lys	Arg	Arg	Leu	Pro	Gln
			180					185					190		
Gly	Lys	Glu	Pro	Gly	Leu	Пe	Asn	Leu	Cys	Ala	Asn	Va]	Pro	Pro	Va]
		195					200					205			
Pro	Gly	Asn	He	Leu	Pro	Pro	Glu	Val	Arg	Gly	Asn	Leu	Met	Ala	Ala
	210					215					220				
Gly	Gln	Asn	Leu	Gln	Ser	Ser	Glu	Arg	Ser	Glu	Met	He	Ala	Thr	Trp
225					230					235					240
Ser	Pro	Ala	Val	Arg	Thr	Leu	Arg	Asn	He	Thr	Asn	Asn	Ala	Asp	lle
				245					250					255	
Gln	Gln	Met	Asn	Arg	Pro	Ser	Asn	Val	Ala	His	Ile	Leu	Gln	Thr	Leu
			260					265					270		
Ser	Ala	Pro	Thr	Lys	Asn	Leu	Glu	Gln	Gln	Val	Asn	His	Ser	Gln	Gln
		275					280					285			
Gly	llis	Thr	Asn	Ala	Asn	Ala	Val	Leu	Phe	Ser	Gln	Val	Lys	Val	Thr
	290					295					300				
Pro	Glu	Thr	His	Met	Leu	Gln	Gln	Gln	Gln	Gln	Ala	Gln	Gln	Gln	Gln
305					310					315					320
Gln	Gln	His	Pro	Val	Leu	His	Leu	Gln	Pro	Gln	Gln	lle	Met	Gln	Leu
				325					330					335	
Gln	Gln	Gln	Gln	Gln	Gln	Gln	He	Ser	Gln	Gln	Pro	Tyr	Pro	Gln	Gln
			340					345					350		
Pro	Pro	His	Pro	Phe	Ser	Gln	Gln	Gln	Gln	Gln	Gln		Gln	Ala	His
		355					360					365			
Pro	His	Gln	Phe	Ser	Gln		G1n	Leu	Gln	Phe	Pro	Gln	Gln	Gln	Leu
	370					375					380				
	Pro	Pro	Gln	Gln		His	Arg	Pro	Gln		Gln	Leu	Gln	Pro	
385					390					395	0.7				400
Gln	Glp	Glp	Hic	Ala	Lau	Gln	Gln	Gln	Pho	Hic	Glo	Len	Gln	Glr	Hic

Gln Leu Gln Gln Gln Gln Leu Ala Gln Leu Gln Gln Gln His Ser Leu Met His Gln Gln Gln Gln Gln Gln Met Gln Ser Gln Thr Ala Pro His Leu Ser Gln Thr Ser Gln Ala Leu Gln His Gln Val Pro Pro Gln Gln Pro Pro Gln Gln Gln Gln Gln Gln Pro Pro Pro Ser Pro Gln Gln His Gln Leu Phe Gly His Asp Pro Ala Val Glu Ile Pro Glu Glu Gly Phe Leu Leu Gly Cys Val Phe Ala 11e Ala Asp Tyr Pro Glu Gln Met Ser Asp Lys Gln Leu Leu Ala Thr Trp Lys Arg Val Arg Leu Cys Leu Glu Glu Gly

<210> 3395

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3395

 Met Gly Ser Leu Met Ala Glu Met Val Val Lys Pro Thr Met Ser Leu

 1
 5
 10
 15

 Lys Tyr Ser Val Thr Cys Ser Lys Tyr Ser Gly Ser Thr Gly Val Pro
 20
 25
 30

 Val Phe Lys Ala Ser Ala Thr Asp Leu Gly Met Ala Gly Ser Glu Val
 35
 40
 45

 Thr Trp Gly Pro Leu Tyr Leu Ala Gly Leu Gln Leu Pro Ser Gln Pro

50 55 60

Thr Pro Ser His Trp His Pro Arg Arg Gln His Leu Cys Lys Gln Pro

Val Cys Leu Leu Leu Phe Gln Leu Gln Leu Leu Arg Ala Leu Pro Asp Gln lle Leu Gln Val Thr Arg Val Leu Leu Gln His Pro Lys His Arg Val Asn Asp Val Arg Leu Pro Ala Leu Val Asp Val Leu Glu Leu Ala Val Glu Gly Ser Trp <210> 3396 <211> 548 <212> PRT <213> Homo sapiens <400> 3396 Met Gln Pro Gly Leu Ser Pro Gly Ser Pro Gly Asp Pro Arg Pro Pro Thr Pro Glu Thr Asp Tyr Pro Glu Ser Leu Thr Ser Tyr Pro Glu Glu Asp Tyr Ser Pro Val Gly Ser Phe Gly Glu Pro Gly Pro Thr Ser Pro Leu Thr Thr Pro Pro Gly Trp Ser Cys His Val Ser Gln Asp Lys Gln Met Leu Tyr Thr Asn His Phe Thr Gln Glu Gln Trp Val Arg Leu Glu Asp Pro His Gly Lys Pro Tyr Phe Tyr Asn Pro Glu Asp Ser Ser Val Arg Trp Glu Leu Pro Gln Val Pro Val Pro Ala Pro Arg Ser Ile His Lys Ser Ser Gln Asp Gly Asp Thr Pro Ala Gln Ala Ser Pro Pro Glu Glu Lys Val Pro Ala Glu Leu Asp Glu Val Gly Ser Trp Glu Glu Val Ser Pro Ala Thr Ala Ala Val Arg Thr Lys Thr Leu Asp Lys Ala Gly

145					150					155					160
Val	Leu	His	Arg	Thr	Lys	Thr	Ala	Asp	Lys	Gly	Lys	Arg	Leu	Arg	Lys
				165					170					175	
Lys	llis	Trp	Ser	Ala	Ser	Trp	Thr	Val	Leu	Glu	Gly	Gly	Val	Leu	Thr
			180					185					190		
Phe	Phe	Lys	Asp	Ser	Lys	Thr	Ser	Ala	Ala	Gly	Gly	Leu	Arg	G1n	Pro
		195					200					205			
Ser	Lvs		Ser	Thr	Pro	Glu		Thr	Val	Glu	Leu		Glv	Ala	Thr
	210					215	•				220	Ŭ	,		
Len		Trn	Ala	Pro	Lvs		Lvs	Ser	Ser	Arg		Asn	Val	Leu	Glu
225					230		2,0			235	2,0			200	240
	Arg	Ser	Aro	Asn		Ser	Glu	Tyr	Lan		Gln	Hie	Aen	Ser	
Bed	та 8	501	,,,,	245	01)	501	014	.,.	250	110	OIN	1110	пор	255	Old
Ala	I I o	110	Sor		Trn	Hic	Lvc	Ala		Ala	Cln	Clv	Ho	Gln	Clu
Αιа	116	116	260	1111	114	11.1.5	Lys	265	116	MIA	GIII	Gry	270	0111	Giu
Lau	Com	۸1.		Lou	Dwo	Duo	C1		Con	C1	Con	Con		Val	Aan
Leu	361		Glu	Leu	110	110		Gru	261	Glu	261		AI g	Val	veh
Dl	C1	275	C	C1	Λ	1	280	C	Т	C1	C1	285	C1	C1	Λ
rne		ser	ser	GIU	Arg		GIY	ser	irp	GIN		Lys	GIU	Glu	Asp
41.	290	D	A	A 1 .	A 1 .	295	D	41.	1	C1	300	V - 1	C1	1	C1
	Arg	Pro	Asn	Ala		АТа	Pro	Ala	Leu		PTO	vai	ыу	Leu	
305					310					315		D 1		~ 1	320
Ser	Asp	Leu	Ser		Val	Arg	HIS	Lys		Arg	Lys	Phe	Leu	Gln	Arg
		m.		325	~				330	0.1				335	
Arg	Pro	Thr		GIn	Ser	Leu	Arg		Lys	Gly	Tyr	He		Asp	GIn
			340					345					350		
Val	Phe		Cys	Ala	Leu	Ala		Leu	Cys	Glu	Arg	Glu	Arg	Ser	Arg
		355					360					365			
Val		Arg	Phe	Val	Gln		Cys	He	Arg	Ala		Glu	Ala	Arg	G1 y
	370					375					380				
Leu	Asp	He	Asp	Gly	Leu	Tyr	Arg	He	Ser	Gly	Asn	Leu	Ala	Thr	lle
385					390					395					400
Gln	Lys	Leu	Arg	Tyr	Lys	Val	Asp	His	Asp	Glu	Arg	Leu	Asp	Leu	Asp
				405					410					415	
Asp	Gly	Arg	Trp	Glu	Asp	Val	His	Val	Лlе	Thr	Gly	Ala	Leu	Lys	Leu
			420					425					430		
Phe	Phe	Arg	Glu	Leu	Pro	Glu	Pro	Leu	Phe	Pro	Phe	Ser	His	Phe	Arg

Gln Phe lle Ala Ala lle Lys Leu Gln Asp Gln Ala Arg Arg Ser Arg Cys Val Arg Asp Leu Val Arg Ser Leu Pro Ala Pro Asn His Asp Thr Leu Arg Met Leu Phe Gln His Leu Cys Arg Val Ile Glu His Gly Glu Gln Asn Arg Met Ser Val Gln Ser Val Ala Ile Val Phe Gly Pro Thr Leu Leu Arg Pro Glu Val Glu Glu Thr Ser Met Pro Met Thr Met Val Phe Gln Asn Gln Val Val Glu Leu IIe Leu Gln Gln Cys Ala Asp IIe Phe Pro Pro His <210> 3397 · <211> 118 <212> PRT <213> Homo sapiens <400> 3397 Met Met Asp Ala Ser Lys Glu Leu Gln Val Leu His lle Asp Phe Leu Asn Gln Asp Asn Ala Val Ser His His Thr Trp Glu Phe Gln Thr Ser Ser Pro Val Phe Arg Arg Gly Gln Val Phe His Leu Arg Leu Val Leu Asn Gln Pro Leu Gln Ser Tyr His Gln Leu Lys Leu Glu Phe Ser Thr Gly Pro Asn Pro Ser lle Ala Lys His Thr Leu Val Val Leu Asp Pro Arg Thr Pro Ser Asp His Tyr Asn Trp Gln Ala Thr Leu Gln Asn Glu

Ser Gly Lys Glu Val Ser Thr His Trp Ala Gly Gly Trp Ala Gly Trp

100 105 110

Leu Leu Ala Glu Cys Ser

115

<210> 3398

(211) 115

<212> PRT

<213> Homo sapiens

⟨400⟩ 3398

Met Pro Gly Ala Glu Met Trp Thr Glu Gly Asp Phe Ser Ala Ser Leu

5 10 15

Ala Gly Ala Cys Ser Lys Leu Ala Asp Ala Leu Cys Ala Cys Trp Ala 20 25 30

Arg Ser Pro Ser Ser Gly Glu Ala Leu Gly Leu Glu Gln Leu Gly Leu
35 40 45

Ser Trp Leu Leu Thr Pro Glu Pro Gly Ser Leu Leu Val Leu His Tyr 50 55 60

Leu Ala Thr Ser Ala Gln Gly Pro Asp Lys Arg Tyr Cys Leu Arg Ala
65 70 75 80

Thr Glu Asp Thr Gly Ala Gln Ser Trp Thr Thr Gly Pro Gly Pro Gly

Arg Thr Arg Arg Ser Arg Pro Ser Ala Ala Leu Trp Gly Arg Ser Pro
100 105 110

Trp Gly Cys

115

<210> 3399

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3399

Met Leu Gln Phe Pro Gly Phe Leu Val Leu Ile 11e Pro Pro Arg Ser

Cys Leu Leu Gln Arg Ser Thr Val Gln Gln Glu Ala Glu Pro Met Pro Leu Arg Gly Trp Arg Tyr Cys lle Leu Pro Lys lle Pro Ala Ser His Ser Asn Asn Glu Pro Asn Ser Ala Glu Glu Leu Trp Ala Val Val Ser Lys Thr Gln Ala Tyr Ser Leu Pro Pro Leu Pro Phe Leu Phe Arg Pro Val Leu Thr Lys Arg Ile Leu Ala Leu Gln Ile Val Leu Tyr Phe Asp Ala Phe Arg Ile Asn Ile <210> 3400 <211> 123 <212> PRT <213> Homo sapiens <400> 3400 Met Glu Val Val Ile His Ser Ser Pro Met Ser Arg Arg Arg Tyr Ser Phe Leu His Leu Trp Glu Cys Gly Ser Gly Trp Leu Pro Val Asp Ser Pro Pro Arg Thr Gly Leu Gly His Arg Cys Cys Leu Ala Gln Gly His Val Pro Ser Pro Arg Ser Ser His Thr Lys Trp Leu Ser Cys Val llis Gln Gly Ser Thr Thr Leu Gly Ala Thr Thr Ala Pro Gly Leu Pro Val Gly Trp Leu Gly Pro Leu Leu Cys Met His His Ser Pro Thr Ser Leu Gly Pro Ile Leu Lys Ala Val Leu His Lys Ala Phe Thr Cys Asn

Leu Arg Ala Ser Glu Ser Val Pro Trp Gly Ser

<210> 3401															
<211	> 44	13)	
<212> PRT															
<213> Homo sapiens															
<400> 3401															
Met	Gly	Ser	Pro	Ala	His	Arg	Pro	Ala	Leu	Leu	Leu	Leu	Leu	Pro	Pro
1				5					10					15	
Leu	Leu	Leu	Leu	Leu	Leu	Arg	Val	Pro	Pro	Ser	Arg	Ser	Phe	Pro	Asp
			20					25					30		
Thr 1	Pro	Trp	Cys	Ser	Pro	Пе	Lys	Val	Lys	Tyr	Gly	Asp	Val	Tyr	Cys
		35					40					45			
Arg	Ala	Pro	Gln	Gly	Gly	Tyr	Tyr	Lys	Thr	Ala	Leu	Gly	Thr	Arg	Cys
	50					55					60				
Asp	lle	Arg	Cys	Gln	Lys	Gly	Tyr	Glu	Leu	His	Gly	Ser	Ser	Leu	Leu
65					70					75					80
Пе	Cys	Gln	Ser	Asn	Lys	Arg	Trp	Ser	Asp	Lys	Val	He	Cys	Lys	Gln
				85					90					95	
Lys .	Arg	Cys	Pro	Thr	Leu	Ala	Met	Pro	Ala	Asn	Gly	Gly	Phe	Lys	Cys
			100					105					110		
Val .	Asp	Gly	Ala	Tyr	Phe	Asn	Ser	Arg	Cys	Glu	Tyr	Tyr	Cys	Ser	Pro
		115					120					125			
Gly	Tyr	Thr	Leu	Lys	Gly	Glu	Arg	Thr	Val	Thr	Cys	Met	Asp	Asn	Lys
	130					135					140				
Ala	Trp	Ser	Gly	Arg	Pro	Ala	Ser	Cys	Val	Asp	Met	Glu	Pro	Pro	Arg
145					150					155					160
He	Lys	Cys	Pro	Ser	Va]	Lys	Glu	Arg	lle	Ala	Glu	Pro	Asn	Lys	Leu
				165					170					175	
Thr	Val	Arg	Val	Ser	Trp	Glu	Thr	Pro	Glu	Gly	Arg	Asp	Thr	Ala	Asp
			180					185					190		
Gly	He	Leu	Thr	Asp	Val	He	Leu	Lys	Gly	Leu	Pro	Pro	Gly	Ser	Asn
		195					200					205			
Phe	Pro	G1u	GTy	Asp	His	Lys	He	Gln	Tyr	Thr	Va]	His	Asp	Arg	Ala

	210					215					220				
Glu	Asn	Lys	Gly	Thr	Cys	Lys	Phe	Arg	Val	Lys	Val	Arg	Val	Lys	Arg
225					230					235					240
Cys	Gly	Lys	Leu	Asn	Ala	Pro	Glu	Asn	Gly	Tyr	Met	Lys	Cys	Ser	Ser
				245					250					255	
Asp	Gly	Asp	Asn	Tyr	Gly	Ala	Thr	Cys	Glu	Phe	Ser	Cys	lle	Gly	Gly
			260					265					270		
Tyr	Glu	Leu	Gln	Gly	Ser	Pro	Ala	Arg	Val	Cys	Gln	Ser	Asn	Leu	Ala
		275					280					285			
Trp	Ser	Gly	Thr	Glu	Pro	Thr	Cys	Ala	Ala	Met	Asn	Val	Asn	Val	Gly
	290					295					300				
Val	Arg	Thr	Λla	Ala	Ala	Leu	Leu	Asp	Gln	Phe	Tyr	Glu	Lys	Arg	Arg
305					310					315					320
Leu	Leu	He	Val	Ser	Thr	Pro	Thr	Ala	Arg	Asn	Leu	Leu	Tyr	Arg	Leu
				325					330					335	
Gln	Leu	Gly	Met	Leu	Gln	Gln	Ala	Gln	Cys	Gly	Leu	Asp	Leu	Arg	His
			340					345					350		
He	Thr	Val	Val	Glu	Leu	Val	Gly	Val	Phe	Pro	Thr	Leu	He	Gly	Arg
	•	355					360					365			
11e	Gly	Ala	Lys	He	Met	Pro	Pro	Ala	Leu	Ala	Leu	Gln	Leu	Arg	Leu
	370					375					380				
Leu	Leu	Arg	11e	Pro	Leu	Tyr	Ser	Phe	Ser	Met	Va]	Leu	Va]	Asp	Lys
385					390					395					400
His	Gl y	Met	Asp	Lys	Glu	Arg	Tyr	Val	Ser	Leu	Val	Met	Pro	Va]	Ala
				405					410					415	
Leu	Phe	Asn	Leu	He	Asp	Thr	Phe	Pro	Leu	Arg	Lys	Glu	Glu	Met	Val
			420					425					430		
Leu	Gln	Ala	Glu	Met	Ser	Gln	Thr	Cys	Asn	Thr					
		435					440								

<211> 555

<212> PRT

<213> Homo sapiens

<400)> 34	102													
Met	Gly	Lys	Trp	Arg	Pro	Gly	Gln	Gly	His	Thr	Thr	Gly	Ser	Val	Lys
1				5					10					15	
Pro	Leu	Ser	۸rg	Ser	Asp	Ala	Met	Glu	Leu	Asp	Leu	Ser	Pro	Pro	His
			20					25					30		
Leu	Ser	Ser	Ser	Pro	Glu	Asp	Leu	Cys	Pro	Ala	Pro	Gly	Thr	Pro	Pro
		35					40					45			
Gly	Thr	Pro	۸rg	Pro	Pro	Asp	Thr	Pro	Leu	Pro	Glu	Glu	Val	Lys	Arg
	50					55					60				
Ser	Gln	Pro	Leu	Leu	He	Pro	Thr	Thr	Gly	Arg	Lys	Leu	Arg	Glu	Glu
65					70					75					80
Glu	Arg	Arg	Ala	Thr	Ser	Leu	Pro	Ser	He	Pro	Asn	Pro	Phe	Pro	Glu
				85					90					95	
Leu	Cys	Ser	Pro	Pro	Ser	Gln	Ser	Pro	He	Leu	Gly	Gly	Pro	Ser	Ser
			100					105					110		
Ala	Arg	Gly	Leu	Leu	Pro	Arg	Asp	Ala	Ser	Arg	Pro	His	Val	Val	Lys
		115					120					125			
Val	Tyr	Ser	Glu	Asp	Gly	Ala	Cys	Arg	Ser	Val	Glu	Val	Ala	Thr	Gly
	130					135					140				
Ala	Thr	Ala	Arg	His	Val	Cys	Glu	Met	Leu	Val	Gln	Arg	Ala	His	Ala
145					150					155					160
Leu	Ser	Asp	Glu	Thr	Trp	Gly	Leu	Va]	Glu	Cys	His	Pro	His	Leu	Ala
				165			•		170					175	
Leu	Glu	Arg	Gly	Leu	Glu	Asp	His	Glu	Ser	¥a]	Val	Glu	Val	Gln	Ala
			180					185					190		
Ala	Trp	Pro	Val	Gly	Gly	Asp	Ser	Arg	Phe	Va]	Phe	Arg	Lys	Asn	Phe
		195					200					205			
Ala	Lys	Tyr	Glu	Leu	Phe	Lys	Ser	Ser	Pro	His	Ser	Leu	Phe	Pro	Glu
	210					215					220				
Lys	Met	Val	Ser	Ser	Cys	Leu	Asp	Ala	His	Thr	Gly	He	Ser	His	Glu
225					230					235					240
Asp	Leu	He	Gln	Asn	Phe	Leu	Asn	Ala	Gly	Ser	Phe	Pro	Glu	He	G] n
				245					250					255	
Gly	Phe	Leu	GJn	Leu	Arg	Gly	Ser	Gly	Arg	Lys	Leu	Trp	Lys	Arg	Phe
			260					265					270		
Pho	Cvc	Pho	Lou	Arc	Ano	Sam	C1v	1	Tur	Tur	Sam	The	Lvc	C1v	The

		275					280					285			
Ser	Lys	Asp	Pro	Arg	His	Leu	Gln	Tyr	Val	Λla	Asp	Val	Asn	Glu	Ser
	290					295					300				
Asn	Val	Tyr	Val	Val	Thr	Gln	Gly	Arg	Lys	Leu	Tyr	Glv	Met	Pro	Thr
305					310					315					320
Asp	Phe	Gly	Phe	Cys	Val	Lys	Pro	Asn	Lys	Leu	Arg	Asn	Gly	His	Lys
				325					330					335	
Gly	Leu	Arg	He	Phe	Cys	Ser	Glu	Asp	Glu	Gln	Ser	Arg	Thr	Cys	Trp
			340					345					350		
Leu	Ala	Ala	Phe	Arg	Leu	Phe	Lys	Tyr	Gly	Va]	Gln	Leu	Tyr	Lys	Asn
		355					360					365			
Tyr	Gln	Gln	Ala	Gln	Ser	Arg	His	Leu	His	Pro	Ser	Cys	Leu	G1 y	Ser
	370					375					380				
Pro	Pro	Leu	Arg	Ser	Ala	Ser	Asp	Asn	Thr	Leu	Val	Ala	Met	Λsp	Phe
385					390					395					400
Ser	Gly	His	Ala	Gly	Arg	Val	He	G]u	Asn	Pro	Arg	Glu	Ala	Leu	Ser
				405					410					415	
Val	Ala	Leu	Glu	G]u	Ala	Gln	Ala	Trp	Arg	Lys	Lys	Thr	Asn	His	Arg
			420					425					430		
Leu	Ser		Pro	Met	Pro	Ala	Ser	G1 y	Thr	Ser	Leu		Ala	Ala	Ile
		435			_		440					445			_
His		Thr	Gln	Leu	Trp		His	G1 y	Arg	He		Arg	Glu	Glu	Ser
0.1	450		, ,	6.1	0.1	455	0.1				460		151		., .
	Arg	Leu	11e	Gly		GIn	Gly	Leu	Val		Gly	Leu	Phe	Leu	
465	C 1	c	61		470	D	C1	C 1	121	475		C	,	6	480
Arg	Giu	Ser	GIN		Asn	Pro	Gln	GIY		vaj	Leu	2er	Leu		HIS
1	C1	1	V = 1	485	112 -	т	1	11.	490	Dana	C	C1	C1	495	C1
Leu	0111	Lys	500	Lys	nis	Tyr	Leu	505	Leu	110	261	01u	510	Glu	01 y
A 25/5	Lau	Tun		Son	Mot	Acn	Asp		Clo	The	Arror	Dho		Acn	Lau
AIg	Leu	515	rne	361	Met	nsp	520	Oly	0111	1111	Mg	525	1111	лър	Leu
lau	Gln		Val	Glu	Pho	Hie	Gln	Lau	Aen	Ara	Glv		Lou	Pro	Cue
i, cu	530	Lea	, (1)	O1 ti	riic	535	0111	1,e u	11.511	au g	540	110	1.00	110	Cy.5
Leu		Arg	His	Cvs	Cvs		Arg	Val	Ala	Leu	., 10				
545		. 3		J	550					555					

<211> 121 <212> PRT <213> Homo sapiens <400> 3403 Met Lys Ser Arg Leu Arg Arg Ser Gln Met Glu Met Arg Asp Leu Leu 1 15 Gly Pro Gly Val Lys Val Thr Phe Val Arg Thr Leu Trp Leu Glu Thr 25 Leu Cys Pro Cys Pro Arg Asn Leu Trp Asn Phe Glu Leu Glu Ser Glu 40 Asp Leu Gly Tyr Leu Ala Glu Glu He Ser Lys Gln Gln Ser Val Gln 50 55 60 Asp Val Ala Trp Leu Leu Val Val Cys Ala His Ile Cys Glu Gln 70 75 Arg His Asp Lys Lys Leu Glu Leu Ile Phe Lys Lys Glu Ala Glu Cys 85 90 Lys Ser Leu Glu Asn Leu Gln Pro Gly His Val Val Glu Lys Lys Lys 100 110 Asn His Phe Leu Glu Arg Asn Ser Ser 115 120 <210> 3404 <211> 110 <212> PRT <213> Homo sapiens <400> 3404 Met Pro Leu His Thr Leu Leu 11e Phe Pro Val Met Ser Ser Gly Ala 10 Leu Leu Leu Ala Val Ala Tyr Lys Ala Ser Trp Ser Gly Ser Lys Ala 20 25 30

Trp Gln Ser Leu Ser Gln Gly Lys Leu Gln Ala Ala Asn Ser Pro His

⟨210⟩ 3403

⟨210⟩ 3405

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3405

Met Thr Arg Gly Thr Gln Gly Leu Pro Met Thr Met Gly Pro Arg Gly
1 5 10 15

Arg His Leu Ala Gln Gly Pro Val Leu Glu Thr Asp Asp Pro Arg Arg
20 25 30

Arg Arg Gln Gly Arg Arg Glu Ala Gly Arg Ala Gly Met Val Ser Gln
35 40 45

Ala Glu Gly Arg Thr Arg Thr Arg Met Glu Leu Gly Asn Asp Pro Gly
50 55 60

Val Phe Gly Gly Cys Arg Trp Val Arg Met Ala Val Gln Gly Gly Lys
65 70 75 80

Gly Cys Val Ala Gly Glu Gln Pro Gly Glu Ala Gln Thr Leu Leu Lys 85 90 95

Arg Cys Leu Cys Arg Pro Pro His Pro Leu Pro Ala Pro Ser Gly 100 105 110

Ala Pro Ala Pro Pro Cys Ser Ala 115 120

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<211> 100
<212> PRT
<213> Homo sapiens
<400> 3406
Met Arg Glu Val Gly Glu Ala Arg Glu Ala His Gly Ala Pro Ala Gln
Ala Pro His Thr Pro Ser Val Val Thr Val Ala His Glu Val Asn Ser
             20
                                  25
                                                      30
Pro Pro Pro Leu Gly Glu Lys Glu Ala Ala Trp Ala Ala Thr Cys Ser
                              40
                                                  45
Pro Ala Leu Pro Pro Pro Thr Ala Leu Met Asp Pro Ser Leu Pro Gly
                         55
Gly His Cys Phe Val Gly Phe Ser Pro Phe Val Gly Lys Gly Arg Cys
 65
                     70
                                          75
Pro Ala Gly Leu Gly Leu Val Arg Glu Glu Ser Arg Ala Leu Glu Arg
                 85
                                      90
                                                          95
Gly Ala Gln His
            100
<210> 3407
<211> 258
<212> PRT
<213> Homo sapiens
<400> 3407
Met Ala Ser Leu Leu Phe Leu Val Val Asn Leu Thr Cys Ala Met Leu
  1
                  5
                                      10
                                                          15
Val His Gly Asp Val Pro Glu Asn Gln Leu Lys Trp Thr Val Phe Val
                                  25
Arg Ala Leu Ile Asn Asp Ser Leu Phe Ile Leu Cys Ala Ile Ser Leu
                             40
Val Cys Tyr lle Cys Lys lle Thr Lys Met Ser Ser Ala Asn Val Tyr
```

55

Leu Glu Ser Lys Gly Met Ser Leu Cys Gln Thr Val Val Val Gly Ser

60

65					70					75					80
Val	Val	lle	Leu	Leu	Tyr	Ser	Ser	Arg	Ala	Cys	Tyr	Asn	Leu	Val	Val
				85					90					95	
Val	Thr	He	Ser	Gln	Asp	Thr	Leu	Glu	Ser	Pro	Phe	Asn	Tyr	G1 y	Trp
			100					105					110		
Asp	Asn	Leu	Ser	Asp	Lys	Λla	His	Val	Glu	Asp	He	Ser	Gly	Glu	Glu
		115					120					125			
Tyr	lle	Val	Phe	Gly	Met	Val	Leu	Phe	Leu	Trp	Glu	llis	Va]	Pro	Ala
	130					135					140				
Trp	Ser	Val	Val	Leu	Phe	Phe	Arg	Ala	Gln	Arg	Leu	Asn	Gln	Asn	Leu
145					150					155					160
Ala	Pro	Ala	Gly	Met	lle	Asn	Ser	His	Ser	Tyr	Ser	Ser	Arg	Ala	Tyr
				165					170					175	
Phe	Phe	Asp	Asn	Pro	Arg	Arg	Tyr	Asp	Ser	Asp	Asp	Asp	Leu	Pro	Arg
			180					185					190		
Leu	Gly	Ser	Ser	Arg	Glu	Gly	Ser	Leu	Pro	Asn	Ser	GIn	Ser	Leu	Gly
		195					200					205			
Trp	Tyr	Gly	Thr	Met	Thr	Gly	Cys	Gly	Ser	Ser	Ser	Tyr	Thr	Val	Thr
	210					215					220				
Pro	His	Leu	Asn	Gly	Pro	Met	Thr	Asp	Thr	Ala	Pro	Leu	Leu	Phe	Thr
225					230					235					240
Cys	Ser	Asn	Leu	Asp	Leu	Asn	Asn	His	His	Ser	Leu	Tyr	Val	Thr	Pro
				245					250					255	
Gln	Asn														

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3408

Met Ser Ala Thr Leu Arg Glu Arg Leu Arg Lys Thr Arg Phe Ser Phe

1 5 10 15

Asn Ser Ser Tyr Asn Val Val Lys Arg Leu Lys Val Glu Ser Glu Glu

Asn Asp Gln Thr Phe Ser Glu Lys Pro Ala Ser Ser Thr Glu Glu Asn Cys Leu Glu Phe Gln Glu Ser Phe Lys His 11e Asp Ser Glu Phe Glu Glu Asn Thr Asn Leu Lys Asn Thr Leu Lys Asn Leu Asn Val Cys Glu Ser Gln Ser Leu Asp Ser Gly Ser Cys Ser Ala Leu Gln Asn Glu Phe Val Ser Glu Lys Leu Pro Lys Gln Arg Leu Asn Ala Glu Lys Ala Lys Leu Val Lys Gln Val Gln Glu Lys Glu Asp Leu Leu Arg Arg Leu Lys Leu Val Lys Met Tyr Arg Ser Lys Asn Asp Leu Ser Gln Leu Gln Leu Leu 11e Lys Lys Trp Arg Ser Cys Ser Gln Leu Leu Leu Tyr Glu Leu Gln Ser Ala Val Ser Glu Glu Asn Lys Lys Leu Ser Leu Thr Gln Leu lle Asp His Tyr Gly Leu Asp Asp Arg Leu Leu His Tyr Asn Arg Ser Glu Glu Glu Phe Ile Asp Val

<210> 3409

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3409

Met Pro Lys Gly Gly Cys Pro Lys Ala Pro Gln Gln Glu Glu Leu Pro

Leu Ser Ser Asp Met Val Glu Lys Gln Thr Gly Lys Lys Asp Lys Asp

Lys Val Ser Leu Thr Lys Thr Pro Lys Leu Glu Arg Gly Asp Gly Gly

Lys Glu Val Arg Glu Arg Ala Ser Lys Arg Lys Leu Pro Phe Thr Ala Gly Ala Asn Gly Glu Gln Lys Asp Ser Asp Thr Gly Pro Pro Gly Ser Cys Leu Ser Trp Gly Ser His Glu Gly Ala Leu Val Arg Ser Ala Met Gly Arg Ser Cys Leu Pro Ser Ala Arg Gly Cys Phe Phe Gly Thr Arg Gly Lys Ile Met Ile Phe Leu Phe Cys Phe Asp Leu <210> 3410 <211> 148 <212> PRT <213> Homo sapiens <400> 3410 Met Pro Phe Ala Glu Asp Lys Thr Tyr Lys Tyr Ile Cys Arg Asn Phe Ser Asn Phe Cys Asn Val Asp Val Val Glu Ile Leu Pro Tyr Leu Pro Cys Leu Thr Ala Arg Asp Gln Asp Arg Leu Arg Ala Thr Cys Thr Leu Ser Gly Asn Arg Asp Thr Leu Trp His Leu Phe Asn Thr Leu Gln Leu Pro Thr Trp Ala Gly Glu Glu Thr Pro Gly Gly Gln Ser Ser Gly Arg Gly Leu Asp Phe Ser Ser Leu Thr Ser Gly Ala Val Trp Leu Trp Gln Met Ser Asp Phe Trp Ser Cys Phe Ser Thr Trp Thr Val Ser Ile Trp Leu Ile Leu His Trp Val Leu Leu Arg Leu Asn Leu Gln Val Phe Ala

```
Lys Cys Leu Ala Gln Ser Lys Trp Pro Leu Leu Pro Ser Leu Ser
    130
                        135
Cys Pro Thr Trp
145
<210> 3411
<211> 527
<212> PRT
<213> Homo sapiens
<400> 3411
Met Leu Ala Lys Pro His Gln Arg Leu Thr Lys Tyr Pro Leu Leu Leu
                                                          15
                                     10
Lys Ser Val Leu Arg Lys Thr Glu Glu Pro Arg Ala Lys Glu Ala Val
             20
                                 25
Val Ala Met lle Gly Ser Val Glu Arg Phe Ile His His Val Asn Ala
                             40
Cys Met Arg Gln Arg Gln Glu Arg Gln Arg Leu Ala Ala Val Val Ser
     50
                         55
                                             60
Arg Ile Asp Ala Tyr Glu Val Val Glu Ser Ser Ser Asp Glu Val Asp
                     70
                                         75
Lys Leu Leu Lys Glu Phe Leu His Leu Asp Leu Thr Ala Pro 11e Pro
                                     90
Gly Ala Ser Pro Glu Glu Thr Arg Gln Leu Leu Glu Gly Ser Leu
            100
                                105
                                                    110
Arg Met Lys Glu Gly Lys Asp Ser Lys Met Asp Val Tyr Cys Phe Leu
                            120
Phe Thr Asp Leu Leu Val Thr Lys Ala Val Lys Lys Ala Glu Arg
    130
                        135
                                            140
Thr Arg Val Ile Arg Pro Pro Leu Leu Val Asp Lys Ile Val Cys Arg
                    150
                                        155
Glu Leu Arg Asp Pro Gly Ser Phe Leu Leu IIe Tyr Leu Asn Glu Phe
                                    170
                                                         175
His Ser Ala Val Gly Ala Tyr Thr Phe Gln Ala Ser Gly Gln Ala Leu
```

Cys	Arg	Gly	Trp	Val	Asp	Thr	lle	Tyr	Asn	Ala	Gln	Asn	Gln	Leu	Gln
		195					200					205			
Gln	Leu	Arg	Ala	G1n	Glu	Pro	Pro	Gly	Ser	Gln	G1n	Pro	Leu	Gln	Ser
	210					215					220				
Leu	Glu	Glu	Glu	Glu	Asp	Glu	Gln	Glu	Glu	Glu	Glu	Glu	G] u	Glu	Glu
225					230					235					240
Glu	Glu	Glu	Glu	Gly	Glu	Asp	Ser	Gly	Thr	Ser	Ala	Ala	Ser	Ser	Pro
				245					250					255	
Thr	He	Met		Lys	Ser	Ser	Gly		Pro	Asp	Ser	Gln		Cys	Ala
			260					265					270		
Ser	Asp		Ser	Thr	Glu	Thr		Ala	Met	Val	Val		Glu	Pro	Gly
	T)	275	C	C	D	C1	280		C .	61		285	6		0.1
Asp		Leu	Ser	Ser	Pro	Glu	Phe	Asp	Ser	GIY		Phe	Ser	Ser	GIn
Con	290	C1	The	Com	1	295	Tlan	ть	A i o	C - 11	300	A 1 -	ть	D	Т1
305	ASP	GIU	1111	261	310	Ser	1111	IIII	Ата	315	ser	AIA	Inr	Pro	
	Glu	Lou	Lou	Pro		Gly	Pro	Val	Acn		Ara	Sor	Cve	Sor	320 Mot
001	014	Leu	Leu	325	Lea	Ory	110	, 41	330	Oly	ur 8	501	Cys	335	MC t
Asp	Ser	Ala	Tvr		Thr	Leu	Ser	Pro		Ser	Leu	Gln	Asp		Val
·			340	,				345					350		
Ala	Pro	Gly	Pro	Met	Ala	Glu	Leu	Val	Pro	Arg	Ala	Pro	Glu	Ser	Pro
		355					360					365			
Arg	Val	Pro	Ser	Pro	Pro	Pro	Ser	Pro	Arg	Leu	Arg	Arg	Arg	Thr	Pro
	370					375					380				
Val	Gln	Leu	Leu	Ser	Cys	Pro	Pro	His	Leu	Leu	Lys	Ser	Lys	Ser	Glu
385					390					395					400
Ala	Ser	Leu	Leu	G1n	Leu	Leu	Ala	Gly	Ala	Gly	Thr	His	Gly	Thr	Pro
				405					410					415	
Ser	Ala	Pro	Ser	Arg	Ser	Leu	Ser	Glu	Leu	Cys	Leu	Ala	Val	Pro	Ala
			420					425					430		
Pro	Gly		Arg	Thr	Gln	Gly	Ser	Pro	Gln	Glu	Ala	Gly	Pro	Ser	Trp
		435					440					445			
Asp		Arg	Gly	Ala	Pro	Ser	Pro	Gly	Ser	Gly	Pro	Gly	Leu	Va]	G1 y
	450				_	455		_			460				
	Leu	Ala	Gly	Glu		Ala	Gly	Ser	His		Lys	Arg	Cys	Gly	
465					470					475					480

 Leu Pro Ser Gly
 Ala Ser Pro Arg
 Val Gln
 Pro Glu
 Pro Pro Pro Gly
 495

 Val Ser Ala Gln
 His Arg
 Lys
 Leu Thr Leu Ala Gln
 Leu Tyr Arg
 1le

 Arg
 Thr Thr Leu Leu Leu Asn
 Ser Thr Leu Thr Ala Ser Glu
 Val

 515
 520
 525
 525

<210> 3412

⟨211⟩ 632

<212> PRT

<213> Homo sapiens

<400> 3412

Met Trp Leu Lys Pro Glu Glu Val Leu Leu Lys Asn Ala Leu Lys Leu

1 5 10 15

Trp Leu Met Glu Arg Ser Asn Asp Tyr Phe Val Leu Gln Arg Arg Arg 20 25 30

Gly Tyr Gly Glu Glu Gly Gly Gly Leu Thr Gly Leu Leu Val Gly
35 40 45

Thr Leu Asp Ser Val Leu Asp Ser Thr Ala Lys Val Ala Pro Phe Arg
50 55 60

Gly Ala Asn Arg Glu Glu 11e Thr Lys His Trp Asp Trp Leu Glu Gln 85 90 95

Asn lle Met Lys Thr Leu Ser Val Phe Asp Ser Asn Glu Asp Ile Thr
100 105 110

Asn Phe Val Gln Gly Lys 11e Arg Gly Leu 11e Ala Glu Glu Gly Lys 115 120 125

His Cys Phe Ala Lys Glu Asp Asp Pro Glu Lys Phe Arg Glu Ala Leu 130 135 140

Leu Lys Phe Glu Lys Cys Phe Gly Leu Pro Glu Lys Glu Lys Leu Val 145 150 155 160

Thr Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly Arg Val Pro Cys Gln Gly

165 170 175

Trp	Leu	Tyr	Leu	Ser	Thr	Asn	Phe	Leu	Ser	Phe	Tyr	Ser	Phe	Leu	Leu
			180					185					190		
G1 y	Ser	Glu	lle	Lys	Leu	lle	11e	Ser	Trp	Asp	Glu	Val	Ser	Lys	Leu
		195					200					205			
Glu	Lys	Thr	Ser	Asn	Val	lle	Leu	Thr	Glu	Ser	He	His	Val	Cys	Ser
	210					215					220				
Gln	Gly	Glu	Asn	His	Tyr	Phe	Ser	Met	Phe	Leu	His	lle	Asn	Gln	Thr
225					230					235					240
Tyr	Leu	Leu	Met	Glu	Gln	Leu	Ala	Asn	Tyr	Ala	Île	Arg	Arg	Leu	Phe
				245					250					255	
Λsp	Lys	Glu	Thr	Phe	Asp	Asn	Asp	Pro	Val	Leu	Tyr	Asn	Pro	Leu	Gln
			260					265					270		
He	Thr	Lys	Arg	Gly	Leu	Glu	Asn	Arg	Ala	His	Ser	Glu	Gln	Phe	Asn
		275					280					285			
Ala	Phe	Phe	Arg	Leu	Pro	Lys	Gly	Glu	Ser	Leu	Lys	Glu	Val	His	Glu
	290					295					300				
Cys	Phe	Leu	Trp	Val	Pro	Phe	Ser	His	Phe	Asn	Thr	His	Gly	Lys	Met
305					310					315					320
Cys	lle	Ser	Glu	Asn	Tyr	Ile	Cys	Phe	Ala	Ser	Gln	Asp	Gly	Asn	Gln
				325					330					335	
Cys	Ser	Val	11e	Ile	Pro	Leu	Arg	Glu	Val	Leu	Ala	lle	Asp	Lys	Thr
			340					345					350		
Asn	Asp	Ser	Ser	Lys	Ser	Val	He	He	Ser	He	Lys	Gly	Lys	Thr	Ala
		355					360					365			
Phe	Arg	Phe	His	Glu	Val	Lys.	Asp	Phe	Glu	Gln	Leu	Val	Ala	Lys	Leu
	370					375					380				
Arg	Leu	Arg	Cys	Gly	Ala	Ala	Ser	Thr	Gln	Tyr	His	Asp	lle	Ser	Thr
385					390					395					400
Glu	Leu	Ala	lle	Ser	Ser	Glu	Ser	Thr	Glu	Pro	Ser	Asp	Asn	Phe	G] u
				405					410					415	
Va]	Gln	Ser	Leu	Thr	Ser	Gln	Arg	Glu	Cys	Ser	Lys	Thr	Val	Asn	Thr
			420					425					430		
Glu	Ala	Leu	Met	Thr	Val	Phe	His	Pro	Gln	Asn	Leu	G]u	Thr	Leu	Asn
		435					440					445			
Ser	Lys	Met	Leu	Lys	Glu	Lys	Met	Lys	Glu	Gln	Ser	Trp	Lys	He	Leu
	450					455					460				

Phe Ala Glu Cys Gly Arg Gly Val Ser Met Phe Arg Thr Lys Lys Thr Arg Asp Leu Val Val Arg Gly Ile Pro Glu Thr Leu Arg Gly Glu Leu Trp Met Leu Phe Ser Gly Val Val Asn Asp Met Ala Thr Asn Pro Asp Tyr Tyr Thr Glu Val Val Glu Gln Ser Leu Gly Thr Cys Asn Leu Ala Thr Glu Glu 11e Glu Arg Asp Leu Arg Arg Ser Leu Pro Glu His Pro Ala Phe Gln Ser Asp Thr Gly Ile Ser Ala Leu Arg Arg Val Leu Thr Ala Tyr Ala Tyr Arg Asn Pro Lys Ile Gly Tyr Cys Gln Ala Met Asn lle Leu Thr Ser Val Leu Leu Leu Tyr Ala Lys Glu Glu Glu Ala Phe Trp Leu Leu Val Ala Val Cys Glu Arg Met Leu Pro Asp Tyr Phe Asn Arg Arg Ile Ile Gly Ser Asp Asp Phe Met Pro Leu Val Arg Ile Gln Gly Gln Cys Val Ile Gly Glu Lys

<210> 3413

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3413

 Met Gly Leu Met Gly Leu Met Gly Val Leu Ile Gly Thr Phe Ile Ala His

 1
 5
 10
 15

 Val Val Cys Lys Arg Leu Leu Thr Ala Trp Val Ala Ala Arg Ile Gln
 20
 25
 30

 Ser Ser Glu Lys Leu Ser Ala Val Ile Arg Val Val Glu Gly Gly Ser

		35					40					45			
Gly	Leu	Lys	Val	Val	Ala	Leu	Лlа	Arg	Leu	Thr	Pro	He	Pro	Phe	G1 y
	50					55					60				
Leu	Gln	Asn	Ala	Val	Phe	Ser	He	Thr	Asp	Leu	Ser	Leu	Pro	Asn	Tyr
65					70					75					80
Leu	Met	Ala	Ser	Ser	Val	Gly	Leu	Leu	Pro	Thr	G]n	Leu	Leu	Asn	Ser
				85					90					95	
Tyr	Leu	Gly	Thr	Thr	Leu	Arg	Thr	Met	Glu	Asp	Val	lle	Ala	Glu	G1n
			100					105					110		
Ser	Val	Ser	Gly	Tyr	Phe	Val	Phe	Cys	Leu	Gln	He	lle	Ile	Ser	Πle
		115					120					125		•	
Gly	Leu	Met	Phe	Tyr	Val	Val	His	Arg	Ala	Gln	Val	Glu	Leu	Asn	Ala
	130					135					140				
Ala	He	Val	Ala	Cys	Glu	Met	Glu	Leu	Lys	Ser	Ser	Leu	Val	Lys	Gly
145					150					155					160
Asn	Gln	Pro	Asn	Thr	Ser	${\rm Gl}{\rm y}$	Ser	Ser	Phe	Tyr	Asn	Lys	Arg	Thr	Leu
				165					170					175	
Thr	Phe	Ser	Gl y	Gly	Gly	He	Asn	Val	Val						
			180					185							

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3414

Met Gln Val Pro Pro Leu Tyr Ser Ala Leu Lys Lys Asp Gly Gln Arg 1 5 5 10 15 15 Leu Ser Thr Leu Met Lys Arg Gly Glu Val Val Glu Ala Lys Pro Ala 20 25 30 Arg Pro Val Thr Val Tyr Ser Ile Ser Leu Gln Lys Phe Gln Pro Pro 35 45 Phe Phe Thr Leu Asp Val Glu Cys Gly Gly Gly Phe Tyr Ile Arg Ser

50 55 60 ...
Leu Val Ser Asp Ile Gly Lys Glu Leu Ser Ser Cys Ala Asn Val Leu

70 75 65 Glu Leu Thr Arg Thr Lys Gln Gly Pro Phe Thr Leu Glu Glu His Ala 85 90 Leu Pro Glu Asp Lys Trp Thr 11e Asp Asp 11e Ala Gln Ser Leu Glu 100 105 His Cys Ser Ser Leu Phe Pro Ala Glu Leu Ala Leu Lys Lys Ser Lys 120 Pro Glu Ser Asn Glu Gln Val Leu Ser Cys Glu Tyr 11e Thr Leu Asn 135 Glu Pro Lys Arg Glu Asp Asp Val Ile Lys Thr Cys 145 150

<210> 3415

<211> 373

<212> PRT

<213> Homo sapiens

<400> 3415

 Met Arg
 Val
 Cys
 Ser
 Tyr
 Glu
 Cys
 Leu
 Pro
 Trp
 Glu
 Glu
 Ala
 Met
 Arg

 1
 5
 10
 15

 Thr
 Glu
 Leu
 Glu
 Ser
 Arg
 Ser
 Gly
 Ser
 Glu
 Arg
 Glu
 Arg
 Leu
 Glu
 Thr
 Leu
 Ser
 Leu
 Cys
 Ala
 Glu
 Tyr
 Thr
 Lys

 Pro
 Asp
 Ser
 Arg
 Leu
 Ser
 Thr
 Thr
 Thr
 Thr
 Thr
 Val
 Glu
 Asp
 Val
 Gln
 Lys

 Pro
 Asp
 Ser
 Arg
 Leu
 Ser
 Thr
 Thr

lle Asn Lys Glu Leu Glu Lys Leu Gln Leu Ser Asp Glu Glu Ser Val 65 70 75 80

Phe Glu Glu Ala Leu Met Ser Pro Asp Thr Arg Tyr Arg Cys His Arg 85 90 95

Lys Asp Scr Leu Pro Asp Ala Asp Leu Ala Ser Cys Gly Ser Phe Ser 100 105 110

Gln Ser Ser Ala Ser Phe Phe Thr Pro Arg Ser Thr Arg Asn Asp Glu 115 120 125

Leu Leu Ser Asp Leu Thr Arg Thr Pro Pro Pro Pro Ser Ser Thr Phe

	130					135					140				
Pro	Lys	Ala	Ser	Ser	Glu	Ser	Ser	Tyr	Leu	Ser	lle	Leu	Pro	Lys	Thr
145					150					155					160
Pro	Glu	Gly	11e	Ser	Glu	Glu	Gln	۸rg	Ser	Gln	Glu	Leu	Ala	Ala	Met
				165					170					175	
Glu	Glu	Thr	Arg	lle	Va]	11e	Leu	Asn	Asn	Leu	Glu	Glu	Leu	Lys	Gln
			180					185					190		
Lys	He	Lys	Лѕр	lle	Asn	Asp	Gln	Met	Asp	Glu	Ser	Phe	Arg	Glu	Leu
		195					200					205			
Asp	Met	Glu	Cys	Ala	Leu	Leu	Asp	Gly	Glu	Gln	Lys	Ser	Glu	Thr	Thr
	210					215					220				
Glu	Leu	Met	Lys	Glu	Lys	Glu	11e	Leu	Asp	His	Leu	Asn	Arg	Lys	He
225					230					235					240
Ala	Glu	Leu	Glu	Lys	Asn	He	Val	Gl y	Glu	Lys	Thr	Lys	Glu	Lys	Va]
				245					250					255	
Lys	Leu	Asp	Ala	Glu	Arg	Glu	Lys	Leu	Glu	Arg	Leu	Gln	Glu	Leu	Tyr
			260					265					270		
Ser	Glu	Gln	Lys	Thr	Gln	Leu	Asp	Asn	Cys	Pro	Glu	Ser	Met	Arg	Glu
		275					280					285			
Gln	Leu	Gln	Gln	Gln	Leu	Lys	Arg	Asp	Ala	Asp	Leu	Leu	Asp	Val	Glu
	290					295					300				
Ser	Lys	His	Phe	Glu	Asp	Leu	Glu	Phe	Gln	Gln	Leu	Glu	His	Glu	Ser
305					310					315					320
Arg	Leu	Asp	Glu	Glu	Lys	Glu	Asn	Leu	Thr	Gln	G1n	Leu	Leu	Arg	Glu
				325					330					335	
Val	Ala	Glu	Tyr	Gln	Arg	Asn	He	Val	Ser	Arg	Lys	Glu	Lys	He	Ser
			340					345					350		
Ala	Leu	Lys	Lys	Gln	Ala	Asn	llis	He	Va1	Gln	Gln	Ala	Gln	Arg	Glu
		355					360					365			
G1n	Asp	His	Phe	Val											
	370														

⟨211⟩ 847

<212> PRT

<213> Homo sapiens

<400)> 34	116													
Met	Asn	Ala	Ser	Asn	Asp	Пе	Thr	Met	Glu	Asn	Val	Val	llis	Glu	Leu
1				5					10					15	
G]u	Leu	Tyr	Asn	Thr	Gly	Tyr	Tyr	Leu	Gly	Met	Phe	Met	Asn	Ser	Phe
			20					25					30		
Ala	Val	Phe	G]n	Glu	Cys	Gly	Leu	Trp	Val	Leu	Thr	Asp	Ala	Asn	Leu
		35					40					45			
Thr	Lys	Asp	Tyr	Ile	Asp	Gly	Va]	Tyr	Λsp	Asn	Ala	Glu	Tyr	Ala	Glu
	50					55					60				
Arg	Phe	Met	Glu	Glu	Asn	Glu	Gly	His	He	Va]	Asp	Пe	His	Asp	Phe
65					70					75					80
Ser	Leu	Gly	Ser	Ser	Pro	His	Val	Arg	Lys	His	Phe	Pro	61u	Thr	Trp
				85					90					95	
He	Trp	Leu	Asp	Thr	Asn	Met	Gly	Ser	Arg	lle	Tyr	Gln	Glu	Phe	Glu
			100					105					110		
Val	Thr	Val	Pro	Asp	Ser	He	Thr	Ser	Trp	Val	Ala	Thr	Gly	Phe	Val
		115					120					125			
lle	Ser	Glu	Asp	Leu	Gly	Leu	Gly	Leu	Thr	Thr	Thr	Pro	Val	Glu	Leu
	130					135					140				
Gln	Ala	Phe	Gln	Pro	Phe	Phe	11e	Phe	Leu	Asn	Leu	Pro	Tyr	Ser	Va]
145					150					155					160
He	Arg	Gly	Glu	Glu	Phe	Ala	Leu	Glu	He	Thr	11e	Phe	Asn	Tyr	Leu
				165					170					175	
Lys	Asp	Ala	Thr	Glu	Val	Lys	Val	lle	He	Glu	Lys	Ser	Asp	Lys	Phe
			180					185					190		
Asp	He	Leu	Met	Thr	Ser	Ser			Asn	Ala	Thr		His	Gln	Gln
		195					200					205			
Thr	Leu	Leu	Val	Pro	Ser	Glu	Asp	Gly	Ala	Thr	Val	Leu	Phe	Pro	lle
	210					215					220				
Arg	Pro	Thr	His	Leu	G] y	Glu	Пe	Pro	He	Thr	Val	Thr	Ala	Leu	Ser
225					230					235					240
Pro	Thr	Ala	Ser		Ala	He	Thr	GIn		11e	Leu	Val	Lys		Glu
				245					250					255	
Gly	He	Glu	Lys	Ser	Tyr	Ser	Gln	Ser	He	Leu	Leu	Asp	Leu	Thr	Asp

			260					265					270		
Asn	Arg	Leu	Gln	Ser	Thr	Leu	Lys	Thr	Leu	Ser	Phe	Ser	Phe	Pro	Pro
		275					280					285			
Asn	Thr	Val	Thr	Gly	Ser	Glu	Arg	Val	Gln	lle	Thr	Ala	11e	Gly	Asp
	290					295					300				
Val	Leu	Gly	Pro	Ser	He	Asn	Gly	Leu	Ala	Ser	Leu	He	Arg	Met	Pro
305					310					315					320
Tyr	Gly	Cys	Gly	Glu	Gln	Asn	Met	He	Asn	Phe	Ala	Pro	Asn	He	Tyr
				325					330					335	
lle	Leu	Asp	Tyr	Leu	Thr	Lys	Lys	Lys	Gln	Leu	Thr	Asp	Asn	Leu	Lys
			340					345					350		
Glu	Lys	Ala	Leu	Ser	Phe	Met	Arg	Gln	Gly	Tyr	Gln	Arg	Glu	Leu	Leu
		355					360					365			
Tyr	Gln	Arg	Glu	Asp	Gly	Ser	Phe	Ser	Ala	Phe	Gly	Asn	Tyr	Asp	Pro
	370					375					380				
Ser	Gly	Ser	Thr	Trp	Leu	Ser	Ala	Phe	Val	Leu	Arg	Cys	Phe	Leu	Glu
385					390					395					400
Ala	Asp	Pro	Tyr	lle	Asp	lle	Asp	Gln	Asn	Val	Leu	His	Arg	Thr	Tyr
				405					410					415	
Thr	Trp	Leu	Lys	Gly	His	Gln	Lys	Ser	Asn	Gly	Glu	Phe	Trp	Asp	Pro
			420					425					430		
Gly	Arg	Val	He	His	Ser	Glu	Leu	Gln	Gly	Gly	Asn	Lys	Ser	Pro	Va]
		435					440					445			
Thr	Leu	Thr	Ala	Tyr	He	Val	Thr	Ser	Leu	Leu	Gly	Tyr	Arg	Lys	Tyr
	450					455					460				
Gln	Pro	Asn	He	Asp	Val	Gln	Glu	Ser	lle	His	Phe	Leu	Glu	Ser	G1u
465										475					480
Phe	Ser	Arg	Gly		Ser	Asp	Asn	Tyr		Leu	Ala	Leu	He		Tyr
				485					490					495	
Ala	Leu	Ser		Va]	Gly	Ser	Pro		Ala	Lys	Glu	Ala		Asn	Met
		_	500					505					510		_
Leu	Thr		Arg	Ala	Glu	Gln		G1 y	G] y	Met	Gln		Trp	Val	Ser
C	6.1	515	,		0		520	m.	63	10		525			4.4
5er		Ser	Lys	Leu	Ser	Asp	Ser	Erp	GIn	Pro		5er	Leu	Asp	He
Cl	530 V-1	д1.	A 1	т	A 1	535	,	C	и.	131	540	C1	DI -	C1	TI
u_1u	val	ΛΙа	Ala	IVF	Ala	Leu	Leu	Ser	H1S	rne	Leu	GIB	rne	GIN	ınr

545					550					555					560
Ser	Glu	Gly	He	Pro	He	Met	۸rg	Trp	Leu	Ser	Arg	Gln	Arg	Asn	Ser
				565					570					575	
Leu	Gly	Gly	Phe	Ala	Ser	Thr	Gln	Asp	Thr	Thr	Val	Ala	Leu	Lys	Ala
			580					585					590		
Leu	Ser	Glu	Phe	Ala	Ala	Leu	Met	Asn	Thr	Glu	Arg	Thr	Asn	He	Gln
		595					600					605			
Val	Thr	Val	Thr	Gly	Pro	Ser	Ser	Pro	Ser	Pro	Val	Lys	Phe	Leu	lle
	610					615					620				
Asp	Thr	His	Asn	Arg	Leu	Leu	Leu	Gln	Thr	Ala	Glu	Leu	Ala	Val	Val
625					630					635					640
Gln	Pro	Thr	Ala	Va]	Asn	He	Ser	Ala	Asn	Gly	Phe	Gly	Phe	Ala	11e
				645					650					655	
Cys	Gln	Leu	Asn	Val	Val	Tyr	Asn	Val	Lys	Ala	Ser	Gly	Ser	Ser	Arg
			660					665					670		
Arg	Arg	Arg	Ser	He	Gln	Asn	Gln	Glu	Ala	Phe	Asp	Leu	Asp	Val	Ala
		675					680					685			
Val	Lys	Glu	Asn	Lys	Asp	Asp	Leu	Asn	His	Va]	Asp	Leu	Asn	Val	Cys
	690					695					700				
Thr	Ser	Phe	Ser	Gly	Pro	Gly	Arg	Ser	Gly	Met	Ala	Leu	Met	Glu	Val
705					710					715					720
Asn	Leu	Leu	Ser	Gly	Phe	Met	Val	Pro	Ser	Glu	Ala	lle	Ser	Leu	Ser
				725					730					735	
Glu	Thr	Val	Lys	Lys	Val	Glu	Tyr	Asp	His	Gly	Lys	Leu	Asn	Leu	Tyr
			740					745					750		
Leu	Asp	Ser	Val	Asn	Glu	Thr	Gln	Phe	Cys	Val	Asn	lle	Pro	Ala	Val
		755					760					765			
Arg	Asn	Phe	Lys	Val	Ser	Asn	Thr	Gln	Asp	Ala	Ser	Va]	Ser	He	Val
	770					775					780				
Asp	Tyr	Tyr	Glu	Pro	Arg	Arg	Gln	Ala	Val	Arg	Ser	Tyr	Asn	Ser	G] u
785					790					795					800
Val	Lys	Leu	Ser	Ser	Cys	Asp	Leu	Cys	Ser	Asp	Val	Gln	Gly	Cys	Arg
				805					810					815	
Pro	Cys	Glu	Asn	Gly	Ala	Ser	Gly	Ser	His	His	His	Ser	Ser	Val	Пе
			820					825					830		
Phe	He	Phe	Cys	Phe	Lys	Leu	Leu	Tyr	Phe	Met	Glu	Leu	Trp	Leu	

835 840 845

<210> 3417 <211> 653

<212> PRT

<213> Homo sapiens

<400> 3417

Met Val Glu Leu Val Asn Ile Glu Pro Val Cys Val Arg Gly Gly Leu

1 5 10 15

Tyr Glu Val Asp Val Thr Gln Gly Glu Cys Tyr Pro Val Tyr Trp Asn 20 25 30

Gln Ala Asp Lys lle Pro Val Met Arg Gly Gln Trp Phe lle Asp Gly
35 40 45

Thr Trp Gln Pro Leu Glu Glu Glu Glu Ser Asn Leu Ile Glu Gln Glu
50 55 60

His Leu Asn Cys Phe Arg Gly Gln Gln Met Gln Glu Asn Phe Asp Ile
65 70 75 80

Glu Val Ser Lys Ser Ile Asp Gly Lys Asp Ala Val His Ser Phe Lys 85 90 95

Leu Ser Arg Asn His Val Asp Trp His Ser Val Asp Glu Val Tyr Leu 100 105 110

Tyr Ser Asp Ala Thr Thr Ser Lys Ile Ala Arg Thr Val Thr Gln Lys
115 120 125

Leu Gly Phe Ser Lys Ala Ser Ser Gly Thr Arg Leu His Arg Gly
130 135 140

Tyr Val Glu Glu Ala Thr Leu Glu Asp Lys Pro Ser Gln Thr Thr His 145 150 155 160

The Val Phe Val Val His Gly The Gly Gln Lys Met Asp Gln Gly Arg 165 170 175

lle Ile Lys Asn Thr Ala Met Met Arg Glu Ala Ala Arg Lys Ile Glu 180 185 190

Glu Arg His Phe Ser Asn His Ala Thr His Val Glu Phe Leu Pro Val 195 200 205

Glu Trp Arg Ser Lys Leu Thr Leu Asp Gly Asp Thr Val Asp Ser 11e

	210					215					220				
Thr	Pro	Asp	Lys	Val	Arg	Gly	Leu	Arg	Asp	Met	Leu	Asn	Ser	Ser	Ala
225					230					235					240
Met	Asp	He	Met	Tyr	Tyr	Thr	Ser	Pro	Leu	Tyr	Arg	Asp	Glu	Leu	Val
				245					250					255	
Lys	Gly	Leu	G1n	Gln	Glu	Leu	Asn	Arg	Leu	Tyr	Ser	Leu	Phe	Cys	Ser
			260					265					270		
Arg	Asn	Pro	Asp	Phe	Glu	Glu	Lys	G1 y	Gly	Lys	Val	Ser	He	Val	Ser
		275					280					285			
His	Ser	Leu	Gly	Cys	Val	Ile	Thr	Tyr	Asp	He	Met	Thr	Gly	Trp	Asn
	290					295					300				
Pro	Val	Arg	Leu	Tyr	Glu	Gln	Leu	Leu	Gln	Lys	Glu	Glu	Glu	Leu	Pro
305					310					315					320
Asp	Glu	Arg	Trp	Met	Ser	Tyr	Glu	Glu	Arg	His	Leu	Leu	Asp	Glu	Leu
				325					330					335	
Tyr	Ile	Thr	Lys	Arg	Arg	Leu	Lys	Glu	Ile	Glu	Glu	Arg	Leu	His	Gly
			340					345					350		
Leu	Lys	Ala	Ser	Ser	Met	Thr	Gln	Thr	Pro	Ala	Leu	Lys	Phe	Lys	Val
		355					360					365			
Glu	Asn	Phe	Phe	Cys	Met	Gly	Ser	Pro	Leu	Ala	Val	Phe	Leu	Ala	Leu
	370					375					380				
Arg	Gly	He	Arg	Pro	Gly	Asn	Thr	Gly	Ser	Gln	Asp	His	He	Leu	Pro
385					390					395					400
Arg	Glu	lle	Cys	Asn	Arg	Leu	Leu	Asn	lle	Phe	His	Pro	Thr	Asp	Pro
				405					410					415	
Val	Ala	Tyr	Arg	Leu	Glu	Pro	Leu	He	Leu	Lys	His	Tyr	Ser	Asn	He
			420					425					430		
Ser	Pro		Gln	lle	His	Trp		Asn	Thr	Ser	Asn		Leu	Pro	Tyr
		435		_	_		440					445			
Glu		Met	Lys	Pro	Ser		Leu	Asn	Pro	Ala		Glu	Pro	Thr	Ser
	450					455	_				460				_
	Ser	Glu	Asn	Glu		He	Ser	Thr	He		Ser	Pro	Val	Thr	
465 D					470			0.3	0.3	475		m.			480
Pro	Val	Leu	Ser		Arg	His	Tyr	G1y		Ser	He	Thr	Asn		Gly
		C		485	0.1			C	490	0.		6.1	,	495	67
Lys	Ala	5er	He	Leu	Gly	Ala	Ala	2er.	11e	61 y	Lys	Ыy	Leu	Gly	Gly

			500					505					510		
Met	Leu	Phe	Ser	Arg	Phe	Gly	Arg	Ser	Ser	Thr	Thr	Gln	Ser	Ser	Glu
		515					520					525			
Thr	Ser	Lys	Asp	Ser	Met	Glu	Asp	Glu	Lys	Lys	Pro	Val	Ala	Ser	Pro
	530					535					540				
Ser	Ala	Thr	Thr	Val	Gly	Thr	Gln	Thr	Leu	Pro	His	Ser	Ser	Ser	Gly
545					550					555					560
Phe	Leu	Asp	Ser	Ala	Tyr	Phe	Arg	Leu	Gln	Glu	Ser	Phe	Phe	Asn	Leu
				565					570					575	
Pro	Gln	Leu	Leu	Phe	Pro	Glu	Asn	Val	Met	Gln	Asn	Lys	Asp	Asn	Λla
			580					585					590		
Leu	Va]	Glu	Leu	Asp	His	Arg	Ile	Asp	Phe	Glu	Leu	Arg	Glu	Gly	Leu
		595					600					605			
Va]	Glu	Ser	Arg	Tyr	Trp	Ser	Ala	Val	Thr	Ser	His	Thr	Ala	Tvr	Trp
	610					615					620				
Ser	Ser	Leu	Asp	Val	Ala	Leu	Phe	Leu	Leu	Thr	Phe	Met	Tyr	Lys	His
625					630					635					640
Glu	His	Asp	Asp	Asp	Ala	Lys	Pro	Asn	Leu	Asp	Pro	Ile			
				645					650						

<211> 531

<212> PRT

<213> Homo sapiens

<400> 3418

Met Lys Gly Ala Arg Leu Phe Val Leu Leu Ser Ser Leu Trp Ser Gly

1 5 10 15

Gly Ile Gly Leu Asn Asn Ser Lys His Ser Trp Thr Ile Pro Glu Asp 20 25 30

Gly Asn Ser Gln Lys Thr Met Pro Ser Ala Ser Val Pro Pro Asn Lys
35
40
45

11e Gln Ser Leu Gln 11e Leu Pro Thr Thr Arg Val Met Ser Ala Glu 50 55 60

lle Ala Thr Thr Pro Glu Lys Ala Glu Gly Val Val Lys Leu Gln Asn

65					70					75					80
Leu	Thr	Leu	Pro	Thr	Asn	Ala	Ser	He	Lys	Phe	Asn	Pro	Gly	Ala	Glu
				85					90					95	
Ser	Val	Val	Leu	Ser	Asn	Ser	Thr	Leu	Lys	Phe	Leu	Gln	Ser	Phe	Ala
			100					105					110		
Arg	Lys	Ser	Asn	Glu	Gln	Ala	Thr	Ser	Leu	Asn	Thr	Val	Gly	Gly	Thr
		115					120					125			
Gly	Gly	He	Gly	Gly	Val	Gly	Gly	Thr	Gly	Gly	Val	G1 y	Asn	Arg	Ala
	130					135					140				
Pro	Arg	Glu	Thr	Tyr	Leu	Ser	Arg	Gly	Asp	Ser	Ser	Ser	Ser	Gln	Arg
145					150					155					160
Thr	Asp	Tyr	Gln	Lys	Ser	Asn	Phe	Glu	Thr	Thr	Arg	Gly	Lys	Asn	Trp
				165					170					175	
Cys	Ala	Tyr	Val	His	Thr	Lys	Leu	Ser	Pro	Thr	Va]	He	Leu	Asp	Asn
			180					185					190		
Gln	Val	Thr	Tyr	Val	Pro	Gly	Gly	Lys	Gly	Pro	Cys	Gly	Trp	Thr	Gly
		195					200					205			
Gly	Ser	Cys	Pro	Gln	Arg	Ser	Gln	Lys	Ile	Ser	Asn	Pro	Val	Tyr	Arg
	210					215					220				
Met	Gln	His	Lys	Ile	Val	Thr	Ser	Leu	Asp	Trp	Arg	Cys	Cys	Pro	Gly
225					230					235					240
Tyr	Ser	G1y	Pro	Lys	Cys	Gln	Leu	Arg	Ala	Gln	Glu	Gln	Gln	Ser	Leu
				245					250					255	
He	His	Thr	Asn	Gln	Ala	Glu	Ser	His	Thr	Ala	Va]	Gly	Arg	Gly	Val
			260					265					270		
Ala	Glu	Gln	Gln	Gln	Gln	Gln	Gly	Cys	Gly	Asp	Pro	Glu	Val	Met	Gln
		275					280					285			
Lys	Met	Thr	Asp	Gln	Val	Asn	Tyr	Gln	Ala	Met	Lys	Leu	Thr	Leu	Leu
	290					295					300				
	Lys	Lys	lle	Asp		He	Ser	Leu	Thr		Asn	Asp	Val	Arg	Asn
305					310					315					320
Thr	Tyr	Ser	Ser		Glu	Gly	Lys	Val	Ser	Glu	Asp	Lys	Ser	•	Glu
				325					330					335	
Phe	Gln	Ser		Leu	Lys	Glu	Glu	Tyr	Ser	Ser	Cys	Ser		His	Pro
			340					345					350		
Cys	G1n	Asn	Gly	Gly	Thr	Cys	Пe	Asn	Gly	Arg	Thr	Ser	Phe	Thr	Cys

Ala Cys Arg His Pro Phe Thr Gly Asp Asn Cys Thr Ile Lys Leu Val Glu Glu Asn Ala Leu Ala Pro Asp Phe Ser Lys Gly Ser Tyr Arg Tyr Ala Pro Met Val Ala Phe Phe Ala Ser His Thr Tyr Gly Met Thr Ile Pro Gly Pro Ile Leu Phe Asn Asn Leu Asp Val Asn Tyr Gly Ala Ser Tyr Thr Pro Arg Thr Gly Lys Phe Arg Ile Pro Tyr Leu Gly Val Tyr Val Phe Lys Tyr Thr Ile Glu Ser Phe Ser Ala His Ile Ser Gly Phe Leu Val Val Asp Gly 11e Asp Lys Leu Ala Phe Glu Ser Glu Asn Ile Asn Ser Glu lle His Cys Asp Arg Val Leu Thr Gly Asp Ala Leu Leu Glu Leu Asn Tyr Gly Gln Glu Val Trp Leu Arg Leu Ala Lys Gly Thr Ile Pro Ala Lys Phe Pro Pro Val Thr Thr Phe Ser Gly Tyr Leu Leu Tyr Arg Thr <210> 3419 <211> 112 <212> PRT <213> Homo sapiens <400> 3419

Met Gln Gln Gly Ser Ala Ser Thr Thr Pro Asp Gln Glu Leu Gln Asn

Cys Lys 11e Leu Asp Thr 11e Gly Arg Gly Thr Phe Ser Glu Val Gln

Asp His Met Leu Ile Gly Thr Gln Met Ala Ile Lys Ile Ile Pro Lys

Ala Gly Ser Leu Gly lle Thr Leu Gln Arg Val Ile Ser Ile Leu Lys Leu Leu Cys His Phe Asn Ile Val Arg Leu Tyr Gln Val Ile Asp Thr Pro Asn Thr Ser Tyr Leu Phe Ser Asn Gly Val Cys Lys Arg Arg Thr Pro Thr Gln Pro Ile His His His Gly Leu Met Arg Glu Glu Lys Ala <210> 3420 <211> 167 <212> PRT <213> Homo sapiens <400> 3420 Met Leu Thr Val Ala Leu Leu Ala Leu Leu Cys Ala Ser Ala Ser Gly Asn Ala Ile Gln Ala Arg Ser Ser Ser Tyr Ser Gly Glu Tyr Gly Ser Gly Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro lle Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr lle Val Gly Leu Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val lle Gln Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe IIe Ser Gly

Arg Ser Gly Ser Leu lle Asp Ala lle Gly Leu His Trp Asp Val Tyr

Pro Thr Ser Cys Ser Arg Cys <210> 3421 <211> 323 <212> PRT <213> Homo sapiens <400> 3421 Met Ile Gly Cys Leu His Ala Arg Val Ser Gly Pro Leu Trp Asp Ala Gly Leu Cys Pro Ala Ser Ser Arg Ser Ala His Thr Cys Leu Ser Leu . 30 Ser Val Ser Asp Ala Pro Val Ser Pro Ala Thr Ala Pro His Cys Leu Leu Leu Ser Thr Ala Pro Ala Pro Pro Cys Pro Cys His Gly Val Leu Asn Ser His Pro Phe Ser Pro Pro Phe Pro Gln Arg Pro Asp Gln Glu Leu Thr Gly Ser Trp Gly His Gly Pro Arg Ser Thr Leu Val Arg Ala Lys Ala Met Ala Pro Pro Pro Pro Leu Ala Ala Ser Thr Pro Leu Leu His Gly Glu Phe Gly Ser Tyr Pro Ala Arg Gly Pro Arg Phe Ala Leu Thr Leu Thr Ser Gln Ala Leu His Ile Gln Arg Leu Arg Pro Lys Pro Glu Ala Arg Pro Arg Gly Gly Leu Val Pro Leu Ala Glu Val Ser

Gly Cys Cys Thr Leu Arg Ser Arg Ser Pro Ser Asp Ser Ala Ala Tyr

Phe Cys lle Tyr Thr Tyr Pro Arg Gly Arg Gly Ala Arg Arg Arg

Ala Thr Arg Thr Phe Arg Ala Asp Gly Ala Ala Thr Tyr Glu Glu Asn 195 200 205 Arg Ala Glu Ala Gln Arg Trp Ala Thr Ala Leu Thr Cys Leu Leu Arg 210 215 220 Gly Leu Pro Leu Pro Gly Asp Gly Glu Val Leu Gly Ser Cys Ser 225 230 235 240 lle Leu Glu Pro Pro Trp Cys Leu Cys Arg lle Ser Ser lle Gly Ser 245 250 Cys Val Phe Ile Phe Leu Cys Val Trp Val Met Tyr Leu Ser Gly Ser 260 265 270 Val Arg Ser Asp Thr Gln Gly Trp Ala Thr Glu Gly Thr Lys Arg Gln 280 Glu Asp Arg Met Trp Trp Leu Met Ser Val 11e Leu Ala 11e Trp Glu 290 295 300 Ala Glu Ala Gly Gly Ser Pro Glu lle Arg Ser Ser Arg Pro Ala Trp 305 310 320 315 Leu Thr Trp

<210> 3422

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3422

Met Ser Val Val Pro Glu Lys Ser Gly Cys Leu Cys Leu Ala Ser Leu

1 5 10 15

His Thr Trp Ala Leu Thr Ser Arg Leu Leu Gly Ser Ser Ser Val 20 25 30

Ser Arg Ala Ala Val Leu Leu Leu Leu Val Phe Pro His Phe Pro Pro 35 40 45

Gly Lys Glu Arg Leu Pro Asn Ala Gly Met Glu Tyr Lys Gln Asn Val 50 55 60

Met Gly Ser Ala Val Thr Pro Pro Pro Glu Ala Glu Ala Val Leu Leu 65 70 75 80

Glu Asp Arg Arg His His Arg Val Phe Pro Leu Pro Leu Pro Leu 85 90 95

Leu Arg Asn Val Ser 11e Pro 11e Gly 100 . 105

<210> 3423

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3423

Met Val Lys Gly Gly Ser Ser Ile Ile Ser Pro Asp Thr Asn Leu Leu

1 5 10 15

Asn 11e Lys Gly Ser His Ser Lys Ser Lys Asn Ser His Phe Phe Phe 20 25 30

Ser Asn Thr Val Lys lle Thr Ala Phe Ser Lys Lys Asn Glu Asn Ile 35 40 45

Phe Asn Cys Asp Leu IIe Asp Ser Val Asp Gln IIe Lys Asn Met Pro
50 55 60

Cys Leu Asp Leu Arg Glu Phe Gly Lys Asp Val Lys Pro Trp His Val
65 70 75 80

Glu Thr Thr Glu Ala Ala Arg Asn Asn Glu Asn Thr Gly Phe Asp Ala 85 90 95

Leu Ser His Glu Cys Thr Ala Lys Pro Leu Phe Pro Arg Val Glu Val 100 105 110

Gln Ser Glu Gln Leu Thr Val Glu Glu His 11e Lys Arg Asn Arg Cys 115 120 125

Tyr Ser Asp Thr Glu 130

<210> 3424

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3424 Met Ser IIe Arg Ser Asp Lys IIe Lys Asp IIe Asn Leu Met Phe Pro l Trp Pro Ala Leu Arg Cys Ala Gly Thr Asn Arg Leu Tyr Leu Leu Tyr Phe Phe Pro Phe Phe Leu Lys Arg Ser Leu Ala Gln Ser Pro Arg Leu Glu Gly Ser Gly Ala Ile Ser Ala His Cys Arg Leu Arg Leu Pro Gly Ser Arg Arg Ser Pro Ala Ser Ala Ser Arg Ile Ala Gly Thr Thr Gly Ala Arg His Tyr Ala Arg Leu Ile Phe Cys Val Phe Leu Val Glu Ala Gly Phe His His Val Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Leu Ala Ser Gln Ser Ala Gly lle Thr Gly Val Ser His Cys Val Arg Pro Leu Tyr Phe Phe Glu Leu Gln Thr <210> 3425 <211> 452 <212> PRT <213> Homo sapiens <400> 3425 Met Pro Trp Gly Lys Asn Ser Ser Pro His Trp Gly His His Leu Gly Cys Leu Pro Ser Ala Pro Ala Cys Arg Ile Trp Arg Pro His Ser Arg Pro Ala Trp Glu Pro Pro Arg Pro Ser Pro Leu Leu Cys Gln Asp Met

Ala Leu Gln Asn Ala Leu Tyr Thr Gly Asp Leu Ala Arg Leu Gln Glu

Leu	Phe	Pro	Pro	His	Ser	Thr	Ala	Asp	Leu	Leu	Leu	G1u	Ser	Arg	Ala
65					70					75					80
Ala	Glu	Pro	Arg	Trp	Ser	Ser	His	Gln	Arg	Gly	Leu	Trp	Ser	Leu	Thr
				85					90					95	
Tyr	Glu	Glu	Glu	Leu	Thr	Thr	Pro	Leu	His	Va]	Ala	Ala	Ser	Arg	Gly
			100					105					110		
His	Thr	Glu	Val	Leu	Arg	Leu	Leu	Leu	Arg	Arg	Arg	Ala	Arg	Pro	Asp
		115					120					125			
Ser	Ala	Pro	Gly	Gly	Arg	Thr	Ala	Leu	His	Glu	Ala	Cys	Ala	Ala	G1 y
	130					135					140				
His	Thr	Ala	Cys	Val	His	Val	Leu	Leu	Val	Ala	G1 y	Ala	Asp	Pro	Asn
145					150					155					160
He	Ala	Asp	Gln	Asp	Gly	Lys	Arg	Pro	Leu	His	Leu	Cys	Arg	Gly	Pro
				165					170					175	
Gly	Thr	Leu	Glu	Cys	Ala	Glu	Leu	Leu	Leu	Arg	Phe	Gly	Ala	Arg	Val
			180					185					190		
Asp	Gly	Arg	Ser	Glu	Glu	Glu	Glu	Glu	Thr	Pro	Leu	His	Val	Ala	Ala
		195					200					205			
Arg	Leu	Gly	His	Val	Glu	Leu	Ala	Asp	Leu	Leu	Leu	Arg	Arg	Gly	Ala
	210					215					220				
Cys	Pro	Asp	Ala	Arg	Asn	Ala	Glu	Gly	Trp	Thr	Pro	Leu	Leu	Ala	Ala
225					230					235					240
Cys	Asp	Val	Arg	Cys	Gln	Ser	Пе	Thr	Asp	Ala	G] u	Ala	Thr	Thr	Ala
				245					250					255	
Arg	Cys	Leu	GIn	Leu	Cys	Ser	Leu	Leu	Leu	Ser	Ala	Gly	Ala	Asp	Ala
			260					265					270		
Asp	Ala		Asp	Gln	Asp	Lys		Arg	Pro	Leu	His	Leu	Ala	Cys	Arg
		275					280					285			
Arg		His	Ala	Ala	Val		G1u	Leu	Leu	Leu		Cys	Gly	Val	Ser
	290					295					300				
	Asn	Thr	Met	Asp	Tyr	Gly	Gly	His	Thr	Pro	Leu	His	Cys	Ala	Leu
305					310					315					320
Gln	Gly	Pro	Ala		Ala	Leu	Ala	Gln		Pro	G] u	llis	Val	Val	Arg
				325					330					335	
Ala	Leu	Leu		His	Gly	Ala	Val		Va]	Trp	Pro	Gly		Leu	Pro
			340					345					350		

Lys Val Leu Glu Arg Trp Ser Thr Cys Pro Arg Thr 11e Glu Val Leu 360 Met Asn Thr Tyr Ser Val Val Gln Leu Pro Glu Glu Ala Val Gly Leu 370 375 380 Val Thr Pro Glu Thr Leu Gln Lys His Gln Arg Phe Tyr Ser Ser Leu 390 395 Phe Ala Leu Val Arg Arg Pro Arg Ser Leu Gln His Leu Ser Arg Cys 405 410 Ala Pro Arg Ser His Leu Glu Gly Ser Leu Pro Gln Ala Leu Pro Arg 420 425 430 Leu Pro Leu Pro Pro Arg Leu Leu Arg Tyr Leu Gln Leu Asp Phe Glu 435 440 445 Gly Val Leu Tyr 450

<210> 3426

<211> 398

<212> PRT

<213> Homo sapiens

<400> 3426

 Met
 Val
 Thr
 Leu
 Ile
 Thr
 Glu
 Lys
 Leu
 Gln
 Ser
 Gln
 Ser
 Leu
 Asp
 Ile
 I

Thr Gly Pro Asp Phe Ser Phe Leu Pro Gly Leu Ser Ala Ala Ala His 65 70 75 80

Thr Met Gly Leu Gln Trp Gln Pro Gln Ser Pro Arg Pro Gly Val Gly
85 90 95

Leu Gly Ala Ala Ser Thr Val Asp Pro Ser Glu Ser Thr Gly Ser Ser

			100					105					110		
Thr	Ala	Pro	Pro	Thr	Lys	Arg	His	Cys	Arg	Ser	Leu	Ser	Glu	Pro	Glu
	-	115					120					125			
Glu	Leu	Val	Arg	Cys	Arg	Ser	Pro	Trp	Arg	Pro	Gly	Ser	Ser	Lys	Val
	130					135					140				
Trp	Thr	Pro	Val	Ser	Lys	Arg	Arg	Cys	Asp	Ser	Gly	Gly	Ser	Ala	Thr
145					150					155					160
Arg	Gln	Gly	Ser	Pro	Gly	Ala	Val	Leu	Pro	Arg	Ser	Ala	Val	Trp	Ser
				165					170					175	
Thr	Gly	Pro	Thr	Ser	Pro	Ala	Thr	Pro	Arg	Pro	Ser	Ser	Ala	Ser	Gly
			180					185					190		
Gly	Phe	Val	Asp	Ser	Ser	Glu	Gly	Ser	Ala	Gly	Ser	Gly	Pro	Leu	Trp
		195					200					205			
Cys	Ser	Ala	Glu	Ser	Cys	Leu	Pro	Ser	Thr	Arg	Arg	Arg	Pro	Ser	Leu
	210					215					220				
Ser	Gln	Glu	Arg	Leu	Ala	Gly	Ala	Gly	Thr	Pro	Leu	Pro	Trp	Ala	Ser
225					230					235					240
Ser	Ser	Pro	Thr	Ser	Thr	Pro	Ala	Leu	Gly	Gly	Arg	Arg	Gly	Leu	Leu
				245					250					255	
Arg	Cys	Arg	Ser	Gln	Pro	Cys	Val	Leu	Ser	Gly	Lys	Arg	Ser	Arg	Arg
			260					265					270		
Lys	Arg	Arg	Arg	Glu	Glu	Asp	Ala	Arg	Trp	Thr	Arg	Pro	Ser	Leu	Asp
		275					280					285			
Phe	Leu	Lys	Met	Thr	Gln	Thr	Leu	Lys	Asn	Ser	Lys	Ser	Leu	Cys	Ser
	290					295					300				
Leu	Asn	Tyr	Glu	Asp	Asp	Asp	Glu	Asp	Asp	Thr	Pro	Val	Lys	Thr	Val
305					310					315					320
Leu	Ser	Ser	Pro	Cys	Asp	Ser	Arg	Gly	Leu	Pro	G1y	He	Thr	Met	Pro
				325					330					335	
Gly	Cys	Ser	Gln	Arg	Gly	Leu	Arg	Thr	Ser	Pro	Va]	His	Pro	Asn	Leu
			340					345					350		
Trp	Ala	Ser	Arg	Glu	Ser	Va]	Thr	Ser	Asp	Gly	Ser	Arg	Arg	Ser	Ser
		355					360					365			
Gly	Asp	Pro	Arg	Asp	Gly	Asp	Ser	Val	Gly	Glu	Glu	Gly	Val	Phe	Pro
	370					375					380				
Arg	Ala	Arg	Trp	Glu	Leu	Asp	Leu	Glu	Gln	He	Glu	Asn	Asn		

385 390 395

<210> 3427

<211> 119

<212> PRT

<213> llomo sapiens

<400> 3427

Met Pro Ala Pro Met Val Val Ser Gly Lys Ala His Ser Ser Ser Val

I 5 10 15

Thr Phe Pro Phe Ser lle His Leu Arg Leu His Ala Leu Gln Leu Leu 20 25 30

Gly Leu Cys Ser Cys His lle Glu Glu Gly Gly Trp Ala Arg His Gly
35 40 45

Ile Ile Leu Arg Ser Leu Leu His Gln Leu Leu Gly Thr Met Glu Tyr
50 55 60

Pro Arg Val Val Thr Ala Asp Gly Ala Thr Trp Gly Arg Ala Gln Val 65 70 75 80

Gly Gln Ala Thr Ala Gly Val Met Ala Cys Glu Pro Gln Ala Thr Ser 85 90 95

Gly Thr Phe Pro Thr Ala Ser Met Gln Gly Cys Arg Ala Met Val Pro 100 105 110

Phe Ser Thr Ala Leu Glu Leu 115

<210> 3428

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3428

Met Asp Gln Ser Arg Gly Arg Gly Thr Ala Leu Glu Pro 11e Gly Gly

1 5 10 15

Leu Arg Met Ala Ser Leu Ser Gly Lys Asp Phe His Pro Asp Ser Phe

			20					25					30		
Arg	Pro	Gln	Pro	Gln	Pro	Ser	Arg	Arg	Trp	Ala	Gly	Leu	Glu	Glu	Arg
		35					40					45			
Ser	Ser	Glu	Arg	Thr	lle	Asn	Leu	Ser	Val	Leu	His	Phe	Tyr	Pro	Ser
	50					55					60				
Pro	Gln	Glu	Ser	Pro	Ser	Leu	Pro	Ser	Ala	Val	Arg	Pro	Phe	Pro	Gly
65					70					75					80
Ala	Arg	G1 y	Val	Arg	Ser	Arg	Λla	Leu	Met	G1 y	Val	Asn	Cys	Ser	Leu
				85					90					95	
Asp	Ser	Val	Lys	Leu	Ala	Cys	Trp	Leu	Gly	Val	Phe	Pro	He	Trp	Gly
			100					105					110		
Glu	Ser	Pro	Leu	Thr	Asn	Ser	Pro	Lys	Ala	11e	His	Arg	Ala	Phe	Tyr
		115					120					125			
Ser	Pro	Thr	Ser	Thr	Gln	Leu	Leu	Tyr	Arg	GIn	Arg	Gln	Arg	Gln	Thr
	130					135					140				
His	Thr	His	Ser												
145															
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<212	2> PI	T7													
<213	3> Ho	omo s	sapie	ens											
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Met	Arg	Pro	Leu	Gly	Lys	Gly	Leu	Leu	Pro	Ala	Glu	Glu	Leu	He	Arg
1				5					10					15	
Ser	Asn	Leu	Gly	Val	Gly	Arg	Ser	Leu	Arg	Asp	Cys	Leu	Ser	Gln	Ser
			20					25					30		
Gly	Lys	Leu	Ala	Glu	Glu	Leu	Gly	Ser	Lys	Arg	Leu	Lys	Pro	Ala	Lys
		35					40					45			
Phe	Gly	Thr	Glu	Gly	Lys	Glu	Arg	Val	Glu	Gln	Arg	Thr	Glu	Arg	Gln
	50					55					60				
Arg	Thr	Gly	Ser	Ser	Lys	Glu	Pro	Arg	Met	Gln	He	11e	Cys	Arg	Arg
65					70					75					80

Arg Trp Arg Glu Pro Pro Pro Arg Leu Leu Trp Gly Cys Leu Met Pro

				85					90					95	
Arg	Ala	Gln	Pro	Leu	Leu	His	Val	Thr	Ala	Tyr	Glu	Asn	Thr	Gly	His
			100					105					110		
Trp	Glu	Arg	Leu	Ala	Ser	Val	Val	Ser	Ser	Lys	Thr	Gln	Gln	Pro	Thr
		115					120					125			
Val	11e	Ser	His	Ser	Ser	He	Ser	lle	Thr	Phe	Ser	His	Tyr	Pro	Pro
	130					135					140				
Ala	Thr	Leu	Asp	Ser	Phe	Leu	Val	Leu	Glu	Pro	lle	Lys	Leu	Phe	Pro
145					150					155					160
Val	Ser	Ser	Leu	Arg	Ser	Pro	Leu	Cys	Leu	Asn	Cys	Gly	Ser	Cys	Arg
				165					170					175	
Glu	Ser	lle	Arg	lle	Ser	Gly	Glu	Leu	11e	Gly	Asn	Ala	His	Ser	Pro
			180					185					190		
Λla	Pro	Pro	Arg	Thr	Pro	Glu	Leu	Glu	Thr	Leu	Gly	Trp	Asp	Lys	G1n
		195					200					205			
Ala	Val	Leu	Ser	Gly	Ala	Gln	Val	lle	Leu	Val	Cys	Ala	Glu	Val	
	210					215					220				

〈211〉 132

<212> PRT

<213> Homo sapiens

<400> 3430

Met Val Thr Leu Met Gly Val Trp Leu Gly Pro Trp Gly Arg Gly Met 1 $$ $$

His Thr Ala Pro Ser Gly Gly Gly Cys Cys Val Thr Gly Pro Ala Cys
65 70 75 80

Ser lle Ala Trp Ala Gly Arg Ser Pro Pro Ser Arg Trp lle Phe Gln

Arg Gly Leu Thr Ala Thr Ser Thr Leu Pro Gly Ser Cys Trp Lys Gly Arg Ser Ser Ala Ser Trp Pro His Thr Gly Ala Val Cys Cys Pro Ala Pro Ala Pro Cys <210> 3431 <211> 153 <212> PRT <213> Homo sapiens <400> 3431 Met Glu Gln Asp Asn Ser Pro Arg Lys Ile Gln Phe Thr Val Pro Leu Leu Glu Pro His Leu Asp Pro Glu Ala Ala Glu Gln Ile Arg Arg Arg Arg Pro Thr Pro Ala Thr Leu Val Leu Thr Ser Asp Gln Ser Ser Pro Glu Ile Asp Glu Asp Arg Ile Pro Asn Pro His Leu Lys Lys Leu Gln Asn Ala Ser Leu Lys Leu Thr Arg Glu Ala Val Arg Asn Pro Ala Gln Lys Asn Pro Gln Pro Ile Tyr His His Trp Ile Pro Arg Glu Pro Thr Arg Ser Glu Arg Arg Gly Gly Thr Gly Gly Gln Lys Ser Val Gly Gly Phe Pro Cys Ser Thr His Thr Leu Ala Pro Phe Tyr Val Phe Thr Arg Ser lle Leu Leu Lys Arg Gly Glu Arg Met Ser His Pro Leu Glu Pro Arg Asp Asp Pro Thr Lys Met Pro

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<211> 387
<212> PRT
<213> Homo sapiens
<400> 3432
Met Ser Ser Pro Pro Ala Leu Arg Asp Ser Pro Val Cys Pro Arg Tyr
                  5
                                      10
                                                          15
Ser Pro Thr Thr Pro Thr Phe Gln Leu Glu Ser Leu Ala Gly Thr Gln
             20
                                 25
Glu Leu Pro Thr Asn Ser Ala Val Ala Leu Ser Tyr Ser Pro Val Ser
                             40
                                                  45
Leu Met Ser Ser Pro Pro Ala Pro Trp Asp Ser Pro Val Cys Pro Ser
    50
                         55
Ser Ser Pro Thr Thr Pro Arg Phe Gln Arg Glu Ser Ala Ser His Thr
                     70
                                          75
Pro Glu Ser Pro Thr Asp Ser Gln Thr Ser Arg Arg Ser Ser Leu Val
                 85
                                      90
Ser Leu Arg Ser Leu Pro Ser Ala His Arg Asp Ser Cys Val Ser Phe
            100
                                105
Ser Tyr Ser Arg Asn Phe Ser Arg Phe Gln Leu Asp Ser Val Pro Gly
                            120
                                                 125
Thr His Asp Thr Pro Pro Asn Ser Arg Ile Ser Leu Thr Tyr Ser Pro
    130
                        135
Val Ser Leu Met Phe Ser Pro Pro Ala Leu Arg Asp Ser Ser Val Ser
                    150
                                         155
Leu Ser Tyr Ser Pro Ala lle Ser Thr Ser His Leu Gly Ser Ala Ser
                165
                                     170
                                                         175
His Thr Gln Glu Ser Pro Thr Asn Ser Arg Thr Leu Leu Gln Pro Ser
            180
                                185
Pro 11e Ser Phe Thr Ser Ser Pro Pro Ala Phe Arg Asp Ser Pro Val
                            200
                                                 205
Ser Pro Ser Phe Ser Pro Ala Phe Pro Arg Phe Leu Pro Gln Ser Ala
                                             220
    210
                        215
Pro Gly Thr Gln Gly Tyr Pro Gly His Ser Gln Ala Ser Arg Asp Tyr
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<210> 3432

225					230					235					240
Phe	Pro	Met	Thr	Cys	lle	Tyr	Arg	Gly	Met	Ala	Pro	He	Leu	Pro	Ser
				245					250					255	
Val	Thr	Ser	Asn	Pro	Ser	Pro	Leu	Thr	Leu	Arg	His	Ser	Gln	Gly	Leu
			260					265					270		
Thr	Ala	Thr	Pro	Arg	Tyr	Cys	Pro	Ser	Ala	Arg	Ser	Pro	Gly	Pro	Ser
		275					280					285			
Thr	Ser	Gln	His	Asp	Ala	Ala	Thr	Trp	Pro	Cys	Leu	His	lle	Ser	Gly
	290					295					300				
Glu	Gly	Pro	Thr	Pro	Ser	Arg	Arg	۸rg	Ala	Pro	Pro	Ala	Phe	Arg	Pro
305					310					315					320
His	Thr	Gln	Ala	Cys	Pro	Ser	Thr	Cys	Tyr	Cys	His	Pro	Leu	Ala	Ser
				325					330					335	
Arg	Arg	Gly	Pro	Cys	Asn	Gly	Arg	Tyr	His	Arg	Pro	Va1	Tyr	Pro	His
			340					345					350		
Pro	Thr	Ala	Val	Gln	Arg	Asp	Pro	Pro	Ala	Gly	Pro	Arg	Gly	Cys	His
		355					360					365			
Ser	Pro	Cys	Trp	His	Asp	Ala	Pro	Ala	Cys	Arg	Arg	Pro	Cys	Gly	Pro
	370					375					380				
Arg	Tyr	Arg													
385															
<210)> 34	133													
<21	1> 10	00													
<212	2> PI	RT													
<213	3> Ho	omo s	sapi	ens											
<400)> 34	133													
Met	Pro	Gly	Glu	Pro	Pro	Leu	G1 y	Lys	Met	Phe	Gly	Arg	Gly	Ser	Lys
1				5					10					15	
Gly	Ser	Thr	Glu	Asp	Gly	Leu	Glu	Leu	Arg	Gly	He	His	Phe	Met	Val
			20					25					30		
Lys	Lys	Pro	Phe	Leu	Lys	Glu	Ser	Ser	Thr	Gln	Glu	Thr	Pro	Pro	Thr
		35					40					45			

His Ala Ser Leu Pro Pro Lys Thr Arg Leu Cys Leu Ser His Thr Phe

50 55 60 Tyr Val Leu Tyr 11e Lys Asn Pro Leu Glu Phe Ser Lys Leu Gly 11e 70 75 Val Val Cys Asp Ala Tyr Leu Lys Arg Gly Glu Arg Val Gly His Gly 85 95 Gly Ser Arg Leu 100 <210> 3434 <211> 102 <212> PRT <213> Homo sapiens <400> 3434 Met Gln Ala Leu Ser Lys Leu Gly Ser Leu Ser Gln Leu Asp Trp Gly Pro Arg Pro Gly Ser Gly Ala Ala Gly Ala Trp Ala Trp Gly Leu Ala 20 25 30 Val Ala His Gly Leu Ser Ser Gly Leu Gly Trp Arg Arg Cys Ser Leu 35 40 45 Ala Ala Cys Ala Val Leu Glu Leu Thr Trp Gly Lys Ala Gly Leu Ala 55 Gly Leu Gly Arg Ala Arg Leu Trp Pro Arg Pro Leu Gly Arg Leu Arg 65 70 75 Arg Glu Gln Arg Leu Ser Pro Gly Ala Leu Arg Cys lle Cys Ala Arg 90 95 Ser Val Ala Arg Cys Leu 100

<210> 3435

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3435

Met Ser Ser Gln Cys Leu Glu Thr Arg Thr Val 11e Tyr Arg Ser 11e

1 5 10 15

Phe Leu Val Phe Leu Lys Val Ser Phe His Asn Thr Arg Ser Ser Leu 20 25 30

Pro Leu Val Ser Trp Arg Val His Pro Thr Asp Glu Ser Ser Phe Pro 35 40 45

Val Gly Leu Ser His Leu Gly Asn Ser Leu Arg Ser Thr Tyr Gln Pro 50 55 60

Arg Lys Lys Leu Pro Gly Tyr Leu Leu Pro Thr Cys Pro Gly Leu Ile
65 70 75 80

Asn Thr Lys Gly Gly Lys Leu Lys Gly Ala Ala Asn Trp Ser Thr Trp 85 90 95

Lys Gly Gly Ser Thr Leu Asp Trp Cys Leu Ser Phe Ser Ser Phe Phe
100 105 110

Leu Lys Lys Ile Tyr Phe Leu Asn Asn Asn Lys Cys Thr
115 120 125

<210> 3436

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3436

Met Asp Gly Gln Thr Glu Arg Ala Ala Asn Gln Gln Ala Ser Ser Ser 1 5 10 15

Gln Ala Ser His Leu Trp Pro Cys Tle Phe Leu Ser Val Gly Gln Arg 20 25 30

Tyr Lys Glu lle Arg Gln Lys Tyr Arg Arg Trp Ser Phe Ala Leu Ser

35 40 45

Pro Arg Leu Glu Gly Asn Asp Thr Thr Ile Ala His Trp Ser Leu Glu 50 55 60

Leu Leu Gly Ser His Asp Pro Pro Thr Ser Ala Ser Gln Val Ala Gly
65 70 75 80

Thr Thr Ala Thr His His Cys Gly Gly Leu Thr Gly Gly Val Arg Thr

90 95 Glu Val Asn Ser Leu 100 <210> 3437 <211> 101 <212> PRT <213> Homo sapiens <400> 3437 Met Thr Pro Pro Pro Lys Thr His Thr His Thr Val Val Ser Tyr His 5 10 Ser Arg Trp Ala Met Cys Lys Asp Ser Arg Asp Gln Glu Cys Arg Trp 20 25 30 Pro Gln Gln Gly Trp Leu Ser Phe Pro Cys Ser Phe Thr Ser Gly Thr 40 Ser Ala Gly Lys Gly Leu Ser Ser Trp Asn His Ala Pro Val Ile Gly 50 55 60 Ala Ala Ile Thr Trp Gln Leu Gly Leu Ser Ala Gly Met His Thr Gly 65 70 75 Ala Leu Leu Cys Gly Val Ala Ser Ser Ala Cys Leu Asp Phe Phe Tyr 90 95 Gly Gly Pro Glu Ile 100 <210> 3438 <211> 253 <212> PRT <213> Homo sapiens <400> 3438 Met Leu Ile Leu Gly Ser Met Phe Ser Leu Val Glu Pro Val Leu Thr

10

15

1

Ile	Ala	Ala	Ala	Leu	Ser	Val	Gln	Ser	Pro	Phe	Thr	Arg	Ser	Ala	Gln
			20					25					30		
Ser	Ser	Pro	Glu	Cys	Ala	Ala	Ala	Arg	Arg	Pro	Leu	Glu	Ser	Asp	Gln
		35					40					45			
Gly	Asp	Pro	Phe	Thr	Leu	Phe	Asn	Val	Phe	Asn	Ala	Trp	Va]	Gln	Val
	50					55					60				
Lys	Ser	G1u	Arg	Ser	Arg	Asn	Ser	Arg	Lys	Trp	Cys	Arg	Arg	Arg	Gly
65					70					75					80
He	Glu	Glu	His	Arg	Leu	Tyr	Glu	Met	Ala	Asn	Leu	Arg	Arg	Gln	Phe
				85					90					95	
Lys	Glu	Leu	Leu	Glu	Asp	His	Gly	Leu	Leu	Ala	Gly	Ala	Gln	Ala	Ala
			100					105					110		
Gln	Val	Gly	Asp	Ser	Tyr	Ser	Arg	Leu	Gln	Gln	Arg	Arg	Glu	Arg	Arg
		115					120					125			
Ala	Leu	llis	Gln	Leu	Arg	Arg	Gln	His	Glu	Glu	Gly	Ala	Gly	Arg	Arg
	130					135					140				
Arg	Lys	Val	Leu	Arg	Leu	Gln	Glu	Glu	Gln	Asp	Gly	Gly	Ser	Ser	Asp
145					150					155					160
Glu	Asp	Arg	Ala	Gly	Pro	Ala	Pro	Pro	Gly	Ala	Ser	Asp	Gly	Val	Asp
				165					170					175	
He	Gln	Asp	Val	Lys	Phe	Lys	Leu	Arg	His	Asp	Leu	Ala	Gln	Leu	Gln
			180					185					190		
Ala	Ala	Ala	Ser	Ser	Ala	Gln	Asp	Leu	Ser	Arg	Glu	Gln	Leu	Ala	Leu
		195					200					205			
Leu	Lys	Leu	Val	Leu	Gly	Arg	G1 y	Leu	Tyr	Pro	Gln	Leu	Ala	Val	Pro
	210					215					220				
Asp	Ala	Phe	Asn	Ser	Ser	Arg	Lys	Asp	Ser	Asp	Gln	Val	Gly	Pro	Val
225					230					235					240
Leu	Pro	His	Pro	Met	Phe	Cys	Pro	Pro	Thr	His	G]u	Pro			
				245					250						

<210> 3439

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3439 Met Ala Gln Pro Pro Val Thr Leu Leu Cys Ile Cys Ser Glu Val Leu ì 5 10 15 Val Arg Ala Ala Asp Ser lle Trp Lys Trp Thr Leu Ser Gly Pro Gly 20 25 Pro Gly Ser Val Trp Pro Ser Thr Gly Glu Ala Gly Leu Arg Arg Gly 40 45 Leu Arg Ala Glu Ala Pro Leu Gln Gln Leu Gln Glu Gly Pro Ala Pro 50 55 Gly Glu Glu Cys Leu Gly Arg Ala Trp Gly Leu Arg Val Arg Arg Arg 70 Gly Pro Leu Pro Pro Leu Pro Trp Gly Ser Glu Arg Pro Pro Cys Cys 85 90 95 Leu Glu Gly Ala Trp Gln Leu Glu Trp Glu Gln Arg Pro Gln Gly Gly 100 105 Arg Ala Gly Gly Arg Gly Pro Ala Ala Cys Pro Val Pro Arg Lys Val 115 120 125 Thr Ala Cys Phe Glu Ser Ala Ala Lys Lys Ser Val Gly Gln Phe Arg 130 135 Gln Leu Ser Pro Glu Leu Pro Arg Glu Thr His Pro Ala Cys Pro Ala 150 155 Leu Pro Thr Gly Ser Arg Arg Thr Glu Gly Thr Gln Leu Gly Ala Arg 165 170 175 Arg Pro Gly Leu 180 <210> 3440 <211> 126 <212> PRT <213> Homo sapiens <400> 3440

Met Pro Ser Phe Thr His Ser Pro Pro Glu His Ser Val Ser Pro Met

10

15

5

ł

Val Arg Ala Arg Leu Leu Arg Met Ala Phe Lys Ala Ser Val Pro Ser 25 Pro Arg Pro Ala Ile Leu Gln Arg Val Arg Ser Ala Ser Pro Gly Pro 45 40 Leu Pro Val Leu Leu Cys Glu Ala Pro Cys Pro His Leu Phe Thr Cys 55 60 Gln Pro Leu His Phe Leu Arg Val Leu Thr Leu Val Ser Trp Leu Pro 70 75 Phe Tyr Phe Lys Glu Pro Pro Val Tyr Leu Pro Pro Ser Val Ser Leu 85 90 Ile Leu Leu Ala Leu Ser Phe Phe Cys Ile Ile Tyr Tyr Leu Ile Thr 105 Tyr Lys Lys Met Tyr Thr Leu Met Cys Thr Val Ser Asn Cys 120

<210> 3441

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3441

Met Pro Val Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Leu

1 5 10 15

Glu Leu Arg Ser Ser Gly Pro Ala Leu Asp Lys Met Val Arg Pro Cys
20 25 30

Leu Cys Gln Lys Asn Thr Glu Val Ser Gln Ala Trp Cys Ser Val Pro
35 40 45

Val Val Ala Ala Thr Gly Glu Ala Glu Val Gly Gly Ser Leu Asp Pro 50 55 60

Arg Arg Ser Gly Leu Gln Trp Ala Val 11e Val Pro Leu His Pro Ser
65 70 75 80

Leu Gly Asp Arg Val Arg Pro Cys Leu Lys Lys Arg Lys Val Lys Ala 85 90 95

Thr Arg Gly Gly Ser Cys Leu Trp Phe Gln His Phe Gly Arg Pro Arg 100 105 110 Arg Val Asp His Leu Arg Trp Gly Val 115 120

<210> 3442

⟨211⟩ 322

<212> PRT

<213> Homo sapiens

<400> 3442

Met Arg Pro Lys Pro Pro Ser Arg Ala Gly Val Leu Gln Ile Ala Gln
1 5 10 15

Glu Leu His Arg Lys Ala Glu Gln Thr Pro Pro Arg Pro Arg Pro Arg 20 25 30

Ser Leu Thr Val Ala Arg Gly Ser Val Gly His Thr Glu Glu Arg Gly
35 40 45

Gly Val Ala Ala Glu Leu Arg Lys Arg Leu Val Arg Gly Gly Ala Arg 50 55 60

Arg Gly Ser Arg Asp Gly Gly Arg Gly Arg Gly Gly Gly Val Ala
65 70 75 80

Gly Gln Arg Ser Gln Glu Gly Trp Gly Ser Gly Arg Arg Ala Arg Val 85 90 95

Thr Gly Arg Gly Ser Trp Gly Arg Gly Pro Gly Val Ala Ala Arg Gly
100 105 110

Val Gly Ala Ala Gly Arg Asp Thr Gly Gly Pro Arg Ala Leu Gly Gly
115 120 125

Gly Cys Lys Ala Trp lle Thr Leu Met Ser Gly Glu Thr Cys Thr Gly
130 135 140

Gly Thr lle Leu Ser Pro Thr Ser Ala Pro Glu Ala Gln Pro Ala Asp 145 150 155 160

Gly Ala Gly Cys Arg Thr Ser Gln Gln Ser Leu Gly Gly Lys Gly Gly
165 170 175

Ala Gly Arg Thr His Ala Pro Ser Ala Ala Arg Glu Arg Gly Ala Ala 180 185 190

Pro Pro Gly Asp Arg Arg Val Thr Ala Arg Pro Arg Ala Ala Val Thr 195 200 205 Ser Arg Glu Ala His Ala His Lys Gly Trp Gly Val Arg Gly Gly Ser 215 Ser Ala Ala Pro Ala Gln Leu Leu Arg Glu Ala Gly Ser Ala Pro Ser 230 235 225 240 Gly Arg Gly Val Ser Phe Pro Arg Arg Ala Gly Gly Pro Leu Phe Pro 245 250 Arg Ala Ala Ala Glu Ala Pro Pro Ser Ala Ser Trp Pro Cys Val His 265 270 Thr Pro Asp Cys Gly Pro Gly Arg Thr Leu Ser Ser Cys Ala Glu Arg 275 280 285 Arg Arg Pro Glu Val Arg Ala Ala Arg Ala Gly Pro Ala Pro Arg Thr 295 300 Ala Pro Thr Arg Gly Trp Pro Gly Gln Gly Pro Gly Gly Pro Gly Ser 310 315 320 Gly Val

<210> 3443

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3443

Met Lys Ala Glu Ala Thr Val Ile Pro Ser Arg Cys Ala Arg Gly Leu

1 5 10 15

Pro Ser Trp Gln Val Leu Ser Pro Val Gln Pro Trp Gln Thr Ser Ala 20 25 30

Pro Gln Asn Thr Thr Gln Pro Lys Leu Leu Ala Pro His Gln His Asp 35 40 45

Lys Ser Gln Lys Lys Ser Ser Leu Leu Lys Glu Leu Gly Ala Phe His
50 55 60

11e Thr Ile Ala Leu Leu His Leu Val Phe Gly Gly Tyr Leu Ala Ser65707580

lle Val Lys Asn Leu His Leu Val Val Leu Lys Ser Trp Tyr Pro Phe

85 90 95

Trp Gly Ala Ala Ser Phe Leu Ile Ser Gly Ile Leu Ala Ile Thr Met 100 105 Lys Thr Phe Ser Lys Thr Tyr Leu Lys Met Leu Cys Leu Met Thr Asn 115 120 125 Leu Ile Ser Leu Phe Cys Val Leu Ser Gly Leu Phe Val Ile Ser Lys 135 Asp Leu Phe Leu Glu Ser Pro Phe Glu Ser Pro Ile Trp Arg Met Tyr 150 155 Pro Asn Ser Thr Val His Ile Gln Arg Leu Glu Leu Ala Leu Leu Cys 170 Phe Thr Val Leu Glu Leu Phe Leu Pro Val Pro Thr Ala Val Thr Ala 180 185 Trp Arg Gly Asp Cys Pro Ser Ala Lys Asn Asp Asp Ala Cys Leu Val 195 200 205 Pro Asn Thr Pro Leu His Leu Lys Gly Leu Pro Val Glu Pro Pro Pro 210 220 215 Ser Tyr Gln Ser Val Ile Gln Gly Asp Ala Gln His Lys Gln His Gln 230 235 Arg Leu Arg Glu Val Lys Gln Val Ala Pro Asp Thr Trp 11e Val Thr 245 250 255 Asp Gly Ala Ala Ile Trp Ala Gln Thr Ala Asn 260 265

<210> 3444

<211> 497

<212> PRT

<213> Homo sapiens

<400> 3444

Met Glu Phe Gly Leu Ser Trp 11e Phe Leu Val Val 11e 11e Lys Gly
1 5 10 15

Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Thr
20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe

		35					40					45			
Gly	Asp	Phe	Tyr	Met	Thr	Trp	Leu	Arg	Gln	Val	Pro	Gly	Lys	Asp	Leu
	50					55					60				
Glu	Trp	Leu	Ala	Tyr	He	Ser	Ser	Asn	Gly	Gly	Tyr	Ser	Glu	Tyr	Ala
65					70					75					80
Asp	Ser	Val	Arg	Gly	Arg	Phe	Thr	11e	Ser	Arg	Asp	Asn	Val	Lys	Asn
				85					90					95	
Ser	Leu	His	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Gln	Asp	Thr	Ala	11e
			100					105					110		
Tyr	Tyr	Cys	Ala	Arg	Phe	Thr	Val	Ser	Met	Asp	Thr	Val	Ala	Tyr	Ser
		115					120					125			
Tyr	G1 y	Leu	Asp	Val	Trp	61 y	Pro	Gly	Thr	Ala	Val	Thr	Val	Ser	Ser
	130					135					140				
Ala	Ser	Pro	Thr	Ser	Pro	Lys	Val	Phe	Pro	Leu	Ser	Leu	Cys	Ser	Thr
145					150					155					160
Gln	Pro	Asp	Gly	Asn	Val	Val	He	Ala	Cys	Leu	Val	Gln	Gly	Phe	Phe
				165					170					175	
Pro	Gln	Glu	Pro	Leu	Ser	Val	Thr	Trp	Ser	Glu	Ser	Gly	Gln	G1 y	Val
			180					185					190		
Thr	Ala	Arg	Asn	Phe	Pro	Pro		Gln	Asp	Ala	Ser	Gly	Asp	Leu	Tyr
		195					200					205			
Thr	Thr	Ser	Ser	Gln	Leu	Thr	Leu	Pro	Ala	Thr	G]n	Cys	Leu	Ala	Gly
	210					215					220				
-	Ser	Val	Th.r	Cys		Val	Lys	His	Tyr		Asn	Pro	Ser	Gln	_
225	m.				230			_		235					240
Val	Thr	Val	Pro		Pro	Val	Pro	Ser			Pro	Thr	Pro		Pro
C	TI	15	Б	245 TI	D	C	D	C	250			D		255	C
Ser	Thr	Pro		Inr	Pro	Ser	Pro		Lys	Cys	HIS	Pro		Leu	Ser
I	113	Δ	260 Date	A 1 a	1	C1	۸	265	1	1	C1	C	270	۸1	A
Leu	His		Pro	Ala	Leu	610		Leu	Leu	Leu	бту		61 u	Ala	Asn
Lau	The	275 Cvc	The	Lan	Thu	C1.	280	A 20.2	1 00	116	Con	285	Val	Thu	Db.a
Leu	Thr	Cys	1111	ren	1111		Leu	AI g	ASP	мта		GTŸ	vai	HIII	rne
Thr	290 Trp	The	Dro	Sor	Son	295	Lvs	Sor	Ala	Vo.1	300	Clv	Dro	Dro	C1
305	пЪ	1111	110	261	310	01 y	rys	Ser	MId	315	0111	OLY	110	1.10	320
	Asn	Len	Cvs	Glv		Tyr	Ser	Val	Ser		Va1	Leu	Pro	GLv	

Ala Glu Pro Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr Pro Glu Ser Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Trp Gln Glu Pro Ser Gln Gly Thr Thr Thr Phe Ala Val Thr Ser lle Leu Arg Val Ala Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys Tyr

<210> 3445

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3445

Met Ala Gly Leu Ala Arg Arg Val Val Gly Ala Phe Leu Leu Phe His

I 5 10 15

Phe Lys Gln Lys Ser Gly Ala Glu Thr Gly Glu Ala Ala Leu His Leu
20 25 30

<210> 3446

<211> 175

<212> PRT

<213> Homo sapiens

<400> 3446

130

Met His Gly Glu Lys Ser His Gly Arg Gly Gln Ala Gly Arg Gln Val Pro Leu Lys Gln Gln Ser Val Ser Gly Glu Ser Gln Gln Gly Ala Arg 25 Gln Gly Ala Gly Gln Ser Thr Cys Tyr Leu Ser Ser Ala Phe Leu Cys 35 40 45 Asn Gly Ser Phe Pro Ala Gly Ser Met Ser Leu Trp Asp Pro Gln Pro 55 60 Lys Gln Ala Phe Pro Ser Val Leu Trp Cys Ser Trp Ala Gly Val Pro 75 Gly Arg Arg Thr Gly Gln Arg Asp Pro Arg Val Gln Glu Arg Arg Gly 85 90 95 Asp Phe Val Ser Lys Leu Gly Ala Ala Val Gly Gly Glu Pro Leu Ala 105 Leu Phe Gly Pro His Ser Trp Pro Gly Met Gly His Arg Val Pro Gly 115 120 125 Leu Gly Ala Gly Phe Leu Leu Phe Ala Gly Phe Ala Leu Glu Pro Trp

140

<210> 3447

<211> 487

<212> PRT

<213> Homo sapiens

<400> 3447

Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Glu Gly
1 5 10 15

Val His Cys Glu Ala Gln Val Val Glu Ser Gly Gly Leu Val Gln 20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe 35 40 45

Ser Ser Phe Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Ala Ser Ile Asn Lys Asp Gly Arg Asp Ser Tyr Tyr Val 65 70 75 80

Glu Ser Val Lys Gly Arg Phe Thr 11e Ser Arg Asp Asn Ala Glu Thr 85 90 95

Ser Leu Tyr Leu Gl
n Met Gly Ser Leu Arg Ala Glu Asp Thr Ala Val
 $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$

Tyr Tyr Cys Ala Arg Lys Phe Met Phe Asp Ser Trp Ser Ser Tyr Tyr
115 120 125

Val Glu Gly His Tyr Phe Asp Leu Trp Gly Arg Gly Thr Gln Val Thr 130 135 140

Val Ser Ser Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu 145 150 155 160

Asp Ser Thr Pro Gln Asp Gly Asn Val Val Ala Cys Leu Val Gln

165 170 175

Gly Phe Phe Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly
180 185 190

Gln	Asn	Val	Thr	Ala	Arg	Asn	Phe	Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly
		195					200					205			
Asp	Leu	Tyr	Thr	Thr	Ser	Ser	GIn	Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys
	210					215					220				
Pro	Asp	Gly	Lys	Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro
225					230					235					240
Ser	Gln	Asp	Val	Thr	Val	Pro	Cys	Pro	Val	Pro	Pro	Pro	Pro	Pro	Cys
				245					250					255	
Cys	His	Pro	Arg	Leu	Ser	Leu	His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu
			260					265					270		
Leu	Gly	Ser	Glu	Λla	Asn	Leu	Thr	Cys	Thr	Leu	Thr	Gly	Leu	Arg	Asp
		275					280					285			
Ala	Ser	Gly	Ala	Thr	Phe	Thr	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala
	290					295					300				
Val	Gln	Gly	Pro	Pro	Glu	Arg	Asp	Leu	Cys	Gly	Cys	Tyr	Ser	Val	Ser
305					310					315					320
Ser	Val	Leu	Pro	Gly	Cys	Ala	Gln	Pro	Trp	Asn	His	Gly	Glu	Thr	Phe
				325					330					335	
Thr	Cys	Thr	Ala	Ala	His	Pro	Glu	Leu	Lys	Thr	Pro	Leu	Thr	Ala	Asn
			340					345					350		
He	Thr	Lys	Ser	Gly	Asn	Thr	Phe	Arg	Pro	Glu	Val	llis	Leu	Leu	Pro
		355					360					365			
Pro	Pro	Ser	Glu	Glu	Leu	Ala	Leu	Asn	Glu	Leu	Val	Thr	Leu	Thr	Cys
	370					375					380				
Leu	Ala	Arg	Gly	Phe	Ser	Pro	Lys	Asp	Val	Leu	Val	Arg	Trp	Leu	GIn
385					390					395					400
Gly	Ser	Gln	Glu		Pro	Arg	Glu	Lys		Leu	Thr	Trp	Ala	Ser	Arg
				405					410					415	
Gln	Glu	Pro	Ser	Gln	Gly	Thr	Thr	Thr	Phe	Ala	Val	Thr	Ser	He	Leu
			420					425					430		
Arg	Val		Ala	Glu	Asp	Trp	Lys	Lys	G1 y	Asp	Thr	Phe	Ser	Cys	Met
		435					440					445			
Val	Gly	His	Glu	Λla	Leu	Pro	Leu	Ala	Phe	Thr	G]n	Lys	Thr	lle	Asp
	450					455					460				
	Leu	Ala	Gly	Lys		Thr	His	Val	Asn		Ser	Val	Val	Met	
465					470					475					480

Glu Val Asp Gly Thr Cys Tyr 485

<210> 3448

〈211〉 167

<212> PRT

<213> Homo sapiens

<400> 3448

Met Ala Ser Phe Pro Leu Leu Leu Thr Leu Leu Thr His Cys Ala Gly

1 5 10 15

Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr 20 25 30

Pro Gly Gln Thr Val Thr Ile Ser Cys Ser Gly Ala Ser Ser Asn Ile 35 40 45

Gly Arg Asn Ser Val Asn Trp Phe Gln Gln Leu Pro Gly Thr Ala Pro
50 55 60

Lys Leu Leu Asn His Asn Asn Asn Gln Arg Pro Ala Gly Val Pro Asp 65 70 75 80

Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser 85 90 95

Gly Leu His Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp 100 105 110

Asn Ser Leu Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val 115 120 125

Leu Gly Glu Ser Leu Leu Pro Ser Pro Ser Pro Leu Leu Gly Gln Phe
130 135 140

Leu Leu Phe Leu Phe Val Ser Leu Cys Cys Leu Lys Leu Trp Ser Asp 145 150 155 160

Phe Leu Pro Thr Ser Gln Ala

165

<210> 3449

<211> 425

<212> PRT <213> Homo sapiens

<400)> 34	149													
Met	Val	Pro	Glu	Gly	Leu	Cys	He	Ser	Val	Pro	Cys	Ser	Phe	Ser	Tyr
1				5					10					15	
Pro	Arg	Gln	Asp	Trp	Thr	Gly	Ser	Thr	Pro	Ala	Ty.r	G]y	Tyr	Trp	Phe
			20					25					30		
Lys	Ala	Val	Thr	Glu	Thr	Thr	Lys	Gly	Ala	Pro	Val	Ala	Thr	Asn	His
		35					40					45			
Gln	Ser	Arg	Glu	Val	Glu	Met	Ser	Thr	Arg	Gly	Arg	Phe	Gln	Leu	Thr
	50					55					60				
Gly	Asp	Pro	Ala	Lys	Gly	Asn	Cys	Ser	Leu	Val	He	Arg	Asp	Ala	G1n
65					70					75					80
Met	Gln	Asp	Glu	Ser	Gln	Tyr	Phe	Phe	Arg	Val	Glu	Arg	Gly	Ser	Tyr
				85					90					95	
Val	Arg	Tyr	Asn	Phe	Met	Asn	Asp	Gly	Phe	Phe	Leu	Lys	Val	Thr	Val
			100					105					110		
Leu	Ser	Phe	Thr	Pro	Arg	Pro	Gln	Asp	His	Asn	Thr	Asp	Leu	Thr	Cys
		115					120					125			
His	Val	Asp	Phe	Ser	Arg	Lys	Gly	Val	Ser	Val	Gln	Arg	Thr	Val	Arg
	130					135					140				
Leu	Arg	Va]	Ala	Tyr	Ala	Pro	Arg	Asp	Leu	Val	lle	Ser	He	Ser	Arg
145					150					155					160
Asp	Asn	Thr	Pro	Asp	Pro	Pro	Glu	Asn	Leu	Arg	Val	Met	Val	Ser	G1n
				165					170					175	
Ala	Asn	Arg	Thr	Val	Leu	Glu	Asn	Leu	Gly	Asn	Gly	Thr	Ser	Leu	Pro
			180					185					190		
Val	Leu	Glu	Gly	Gln	Ser	Leu	Cys	Leu	Val	Cys	Va]	Thr	His	Ser	Ser
		195					200					205			
Pro	Pro	Ala	Arg	Leu	Ser	Trp	Thr	Gln	Arg	Gly	Gln	Val	Leu	Ser	Pro
	210					215					220				
Ser	Gln	Pro	Ser	Asp	Pro	Gly	Val	Leu	Glu	Leu	Pro	Arg	Val	Gln	Val
225					230					235					240

Glu His Glu Gly Glu Phe Thr Cys His Ala Arg His Pro Leu Gly Ser

250

255

Gln His Val Ser Leu Ser Leu Ser Val His Tyr Lys Lys Gly Leu 11e 260 Ser Thr Ala Phe Ser Asn Gly Ala Phe Leu Gly Ile Gly Ile Thr Ala 275 285 Leu Leu Phe Leu Cys Leu Ala Leu Ile Ile Met Lys Ile Leu Pro Lys 295 300 Arg Arg Thr Gln Thr Glu Thr Pro Arg Pro Arg Phe Ser Arg His Ser 310 315 320 Thr lle Leu Asp Tyr Ile Asn Val Val Pro Thr Ala Gly Pro Leu Val 330 325 335 Gln Lys Arg Asn Gln Lys Ala Thr Pro Ser Ser Pro Arg Thr Pro Leu 340 345 Pro Pro Gly Ala Pro Ser Pro Glu Ser Lys Lys Asn Gln Lys Lys Gln 365 355 360 Tyr Gln Leu Pro Ser Phe Pro Glu Pro Lys Ser Ser Thr Gln Ala Pro 375 Glu Ser Gln Glu Ser Gln Glu Glu Leu His Tyr Ala Thr Leu Asn Phe 390 395 Pro Gly Val Arg Pro Arg Pro Glu Ala Arg Met Pro Lys Gly Thr Gln 405 410 415 Ala Asp Tyr Ala Glu Val Lys Phe Gln 420 425

<210> 3450

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3450

 Met Val Thr Leu Arg Ser Lys Leu Gly Pro Leu Glu Ile Gln Gln Phe

 1
 5
 10
 15

 Ala Met Leu Leu Arg Glu Tyr Arg Leu Gly Leu Pro Ile Gln Asp Tyr
 20
 25
 30

 Cys Thr Gly Leu Leu Lys Leu Tyr Gly Asp Arg Arg Lys Phe Leu Leu
 45

Leu Gly Met Arg Pro Phe Ile Pro Asp Gln Asp Ile Gly Tyr Phe Glu Gly Phe Leu Glu Gly Val Gly Ile Arg Glu Gly Gly 11e Leu Thr Asp Ser Phe Gly Arg Ile Lys Arg Ser Met Ser Ser Thr Ser Ala Ser Ala Val Arg Ser Tyr Asp Gly Ala Ala Gln Arg Pro Glu Ala Gln Ala Phe His Arg Leu Leu Ala Asp Ile Thr His Asp Ile Glu Ala Leu Ala Pro Asp Asp Asp Asp Asp Glu Asp Glu Pro Arg Gly Ser Arg Gly Gly Ser Asp Ala Ala Glu Asp Asn Tyr Leu

<210> 3451

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3451

Met Arg Arg Asp Val Asn Gly Val Thr Lys Ser Arg Phe Glu Met Phe Ser Asn Ser Asp Glu Ala Val Ile Asn Lys Lys Leu Pro Lys Glu Leu Leu Leu Arg Ile Phe Ser Phe Leu Asp Val Thr Leu Cys Arg Cys Ala Gln Val Ser Arg Ala Trp Asn Val Leu Ala Leu Asp Gly Ser Asn Trp Gln Arg Ile Asp Leu Phe Asp Phe Gln Arg Asp Ile Glu Gly Arg Val Val Glu Asn IIe Ser Lys Arg Cys Gly Gly Phe Leu Arg Lys Leu

Ser Leu Arg Gly Cys Leu Gly Val Gly Asp Asn Ala Leu Arg Thr Phe

			100					105					110		
Ala	Gln	Asn	Cys	Arg	Asn	lle	Glu	Val	Leu	Asn	Leu	Asn	Gly	Cys	Thr
		115					120					125			
Lys	Thr	Thr	Asp	Ala	Thr	Cys	Thr	Ser	Leu	Ser	Lys	Phe	Cys	Ser	Lys
	130					135					140				
Leu	Arg	His	Leu	Asp	Leu	Ala	Ser	Cys	Thr	Ser	lle	Thr	Asn	Met	Ser
145					150					155					160
Leu	Lys	Ala	Leu	Ser	Glu	Gly	Cys	Pro	Leu	Leu	Glu	Gln	Leu	Asn	lle
				165					170					175	
Ser	Trp	Cys	Asp	Gln	Val	Thr	Lys	Asp	Gly	Ile	Gln	Ala	Leu	Val	Arg
			180					185					190		
Gly	Cys	Gly	Gly	Leu	Lys	Ala	Leu	Phe	Leu	Lys	Gly	Cys	Thr	Gln	Leu
		195					200					205			
Glu	Asp	Glu	Ala	Leu	Lys	Tyr	He	Gly	Ala	His	Cys	Pro	Glu	Leu	Val
	210					215					220				
Thr	Leu	Asn	Leu	Gln	Thr	Cys	Leu	Gln	lle	Thr	Asp	Glu	Gly	Leu	He
225					230					235					240
Thr	lle	Cys	Arg	Gly	Cys	His	Lys	Leu	Gln	Ser	Leu	Cys	Ala	Ser	Gly
				245					250					255	
Cys	Ser	Asn	Ile	Thr	Asp	Ala	lle	Leu	Asn	Ala	Leu	Gly	Gln	Asn	Cys
			260					265					270		
Pro	Arg	Leu	Arg	He	Leu	Glu	Val	Ala	Arg	Cys	Ser	Gln	Leu	Thr	Asp
		275					280					285			
Val	Gly	Phe	Thr	Thr	Leu	Ala	Arg	Asn	Cys	His	Glu	Leu	Glu	Arg	Met
	290					295	,				300				
Asp	Leu	Glu	Glu	Cys	Val	Gln	lle	Thr	Asp	Ser	Thr	Leu	lle	Gln	Leu
305					310					315					320
Ser	He	His	Cys	Pro	Arg	Leu	Gln	Val	Leu	Ser	Leu	Ser	His	Cys	Glu
				325					330					335	
Leu	He	Thr	Asp	Asp	Gly	He	Arg	His	Leu	Gly	Asn	Gly	Ala	Cys	Ala
			340					345					350		
His	Asp	Gln	Leu	Glu	Val	11e	Glu	Leu	Asp	Asn	Cys	Pro	Leu	lle	Thr
		355					360					365			
Asp	Ala	Ser	Leu	Glu	His	Leu	Lys	Ser	Cys	His	Ser	Leu	G] u	Arg	He
	370					375					380				
Glu	Leu	Tvr	Asp	Cys	Gln	Gln	Пe	Thr	Arg	Ala	Gly	lle	Lys	Arg	Leu

385 390 395 400 Arg Thr His Leu Pro Asn Ile Lys Val Tyr Ala Tyr Phe Ser Pro Val 410 Thr Pro Pro Pro Ser Val Gly Gly Ser Arg Gln Arg Phe Cys Arg Cys 430 420 425 Cys Ile Ile Leu 435 <210> 3452 <211> 103 <212> PRT <213> Homo sapiens <400> 3452 Met Gly Ala Thr Glu Ala Ala Gly Gly Ala Ala Val Ser Arg Ala Arg Asn Gln Thr Trp Thr Ala Leu Gly Pro Gly Cys Arg Asp Gln Val Thr 20 30 25 Arg Ser Pro Glu Gly Cys Trp Pro Arg Ser Gln Asn Pro Gly Ala Ala 35 40 45 Arg Thr 11e Gly Ser Ser Leu Tyr Gly Thr Gly Asp Arg His Pro Ala 55

Leu Val Pro Cys Ala Val Ala Asp Gly Glu Thr Glu Ala Ser Ser Leu

Pro Gly 11e Thr Val 11e Leu Glu Gln Arg Gly Pro Glu Arg Ala Cys

75

90

80

95

70

Ser Trp Pro Lys Val Thr Gln 100

<210> 3453

65

<211> 319

<212> PRT

<213> Homo sapiens

<400	0> 34	153													
Met	Ala	Ser	Asp	Asp	Phe	Asp	11e	Val	11e	Glu	Ala	Met	Leu	Glu	Ala
1				5					10					15	
Pro	Tyr	Lys	Lys	Glu	G]u	Asp	Glu	Gln	Gln	Arg	Lys	Glu	Val	Lys	Lys
			20					25					30		
Asp	Tyr	Pro	Ser	Asn	Thr	Thr	Ser	Ser	Thr	Ser	Asn	Ser	Gly	Asn	Glu
		35					40					45			
Thr	Ser	Gly	Ser	Ser	Thr	11e	Gly	Glu	Thr	Ser	Lys	Lys	Lys	Arg	Ser
	50					55					60				
Arg	Ser	His	Asn	Lys	Ser	Arg	Asp	Arg	Lys	Arg	Ser	Arg	Ser	Arg	Asp
65					70					75					80
Arg	Asp	Arg	Tyr	Arg	Arg	Arg	Asn	Ser	Arg	Ser	Arg	Ser	Pro	Gly	Arg
				85					90					95	
Gln	Cys	Arg	His	Arg	Ser	Arg	Ser	Trp	Asp	Arg	Arg	His	Gly	Ser	Glu
			100					105					110		
Ser	Arg	Ser	Arg	Asp	His	Arg	Arg	Glu	Asp	Arg	Val	His	Tyr	Arg	Ser
		115					120					125			
Pro	Pro	Leu	Ala	Thr	Gly	Tyr	Arg	Tyr	Gly	His	Ser	Lys	Ser	Pro	His
	130					135					140				
Phe	Arg	Glu	Lys	Ser	Pro	Val	Arg	Glu	Pro	Val	Asp	Asn	Leu	Ser	Pro
145					150					155					160
Glu	Glu	Arg	Asp	Ala	Arg	Thr	Val	Phe	Cys	Met	Gln	Leu	Ala	Ala	Arg
				165					170					175	
He	Arg	Pro	Arg	Asp	Leu	Glu	Asp	Phe	Phe	Ser	Ala	Val	Gly	Lys	Val
			180					185					190		
Arg	Asp	Val	Cys	He	He	Ser	Asp	Arg	Asn	Ser	Arg	Arg	Ser	Lys	Gly
		195					200					205			
He		Tyr	Val	Glu	Phe		Glu	He	Gln	Ser		Pro	Leu	A]a	Пє
	210					215					220				
	Leu	Thr	Gly	Gln		Leu	Leu	Gly	Va]		He	He	Val	Gln	
225					230					235					240
Ser	Gln	Ala	Glu		Asn	Arg	Leu	Ala		Met	Ala	Asn	Asp		G1n
				245					250		_000	_		255	
Lys	Gly	Asn	Gly	GTy	Pro	Met	Arg		Tyr	Val	Gly	Ser		His	Phe
		mı	260					265					270		
Acn	110	Thr	G1n	Aco	Max	Lon	Arca	C1v	Ha	Pho	Chi	Pro	Pho	$C 1 \mathbf{u}$	1 40

280 275 285 lle Asp Asn Ile Val Leu Met Lys Asp Ser Asp Thr Gly Arg Ser Lys 290 295 300 Gly Tyr Gly Phe Ile Thr Leu His Pro Pro Pro Leu Gly Thr Val 305 310 315 <210> 3454 <211> 124 <212> PRT <213> Homo sapiens <400> 3454 Met Gly Lys Arg Asp Pro Arg Ala Gln Leu Phe Leu Pro Ser Ala Gly 1 5 10 Leu Leu Gln Thr Ser Arg Leu His Cys Arg Leu Arg His Phe Leu Ala 25 Glu Pro Pro Ser Phe Leu Leu Ser Phe Gln Leu Leu Leu His Cys 35 40 45 Pro Phe Leu Ser Pro Leu Ser Cys Thr Ser Ala Ser lle Leu Ala Ser 55 Ser Ser Leu Lys Thr Gln Pro Asp Thr 11e Ser Ile 11e Thr Leu Phe 70 lle Ser Gln Trp Arg Arg Trp Gly Ser Arg Gln Glu Arg Gln Ser Val 85 90 Asn Met Leu Pro Leu Lys Phe Cys Thr Ala Leu Ser Leu Leu Gly Leu 100 105 110

Trp Ala Lys Ile Lys Cys Lys Ser Leu Tyr Tyr Ser

120

<210> 3455

<211> 375

<212> PRT

<213> Homo sapiens

<400)> 34	155													
Met	Glu	Asp	Ser	Glu	Ala	Leu	Gly	Phe	Glu	His	Met	Gly	Leu	Asp	Pro
l				5					10					15	
Arg	Leu	Leu	Gln	Ala	Val	Thr	Asp	Leu	Gly	Trp	Ser	Arg	Pro	Thr	Leu
			20					25					30		
11e	Gln	Glu	Lys	Ala	He	Pro	Leu	Ala	Leu	Glu	Gly	Lys	Asp	Leu	Leu
		35					40					45			
Ala	Arg	Ala	Arg	Thr	Gly	Ser	Gly	Lys	Thr	Ala	Ala	Tyr	Ala	He	Pro
	50					55					60				
Met	Leu	Gln	Leu	Leu	Leu	His	Arg	Lys	Ala	Thr	Gly	Pro	Val	Val	Glu
65					70					75					80
Gln	Ala	Val	Arg	Gly	Leu	Va1	Leu	Val	Pro	Thr	Lys	Glu	Leu	Ala	Arg
				85					90					95	
Gln	Ala	Gln	Ser	Met	He	Gln	Gln	Leu	Ala	Thr	Tyr	Cys	Ala	Arg	Asp
			100					105					110		
Val	Arg	Val	Ala	Asn	Val	Ser	Ala	Ala	Glu	Asp	Ser	Val	Ser	G1n	Arg
		115					120					125			
Ala	Val	Leu	Met	Glu	Lys	Pro	Asp	Val	Val	Val	Gly	Thr	Pro	Ser	Arg
	130					135					140				
He	Leu	Ser	His	Leu	Gln	Gln	Asp	Ser	Leu	Lys	Leu	Arg	Asp	Ser	Leu
145					150					155					160
Glu	Leu	Leu	Val	Val	Asp	Glu	Ala	Asp	Leu	Leų	Phe	Ser	Phe	G1 y	Phe
				165					170					175	
Glu	Glu	Glu	Leu	Lys	Ser	Leu	Leu	Cys	His	Leu	Pro	Arg	He	Tyr	G1n
			180					185					190		
Ala	Phe	Leu	Met	Ser	Ala	Thr	Phe	Asn	Glu	Asp	Val	Gln	Лlа	Leu	Lys
		195					200					205			
Glu	Leu	He	Leu	His	Asn	Pro	Val	Thr	Leu	Lys	Leu	Gln	Glu	Ser	Gln
	210					215					220				
Leu	Pro	Gly	Pro	Asp	Gln	Leu	Gln	Gln	Phe	61n	Val	Val	Cys	Glu	Thr
225					230					235					240
Glu	Glu	Asp	Lys	Phe	Leu	Leu	Leu	Tyr	Ala	Leu	Leu	Lys	Leu	Ser	Leu
				245					250					255	
He	Arg	Gly	Lys	Ser	Leu	Leu	Phe	Val	Asn	Thr	Leu	Glu	Arg	Ser	Tyr
			260					265					270		

Arg Leu Arg Leu Phe Leu Glu Gln Phe Ser Ile Pro Thr Cys Val Leu Asn Gly Glu Leu Pro Leu Arg Ser Arg Cys His Ile Ile Ser Gln Phe Asn Gln Gly Phe Tyr Asp Cys Val Ile Ala Thr Asp Ala Glu Val Leu Gly Ala Pro Val Lys Gly Lys Arg Arg Gly Arg Gly Pro Lys Gly Asp Lys Ala Ser Asp Pro Glu Ala Gly Val Ala Arg Gly Ile Asp Phe His His Val Ser Ala Val Leu Asn Phe Asp Leu Pro Pro Thr Pro Glu Ala Tyr Ile His Arg Ala Gly Arg

<210> 3456

<211> 309

<212> PRT

<213> Homo sapiens

<400> 3456

Met Leu Pro Glu Asp Ser Gly Gly Ser Pro Asp Ala Ala Ala Ser Asp Lys His lle Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val Trp lle Met Gly Glu Gly Pro Gly Asp Lys Pro Tyr Glu Glu lle Ser Glu Glu Leu Ile Ala Glu Arg Ala Arg Leu Gln Ala Gln Arg Glu Ala Glu Glu Leu Trp Arg Gln Lys Glu Ala Glu lle Thr Lys Lys Phe Arg Asp Ala Leu Ala Asn Glu Lys Ala Arg lle Leu Ala Glu Lys Trp Lys Val Glu Met Glu Asp Arg Lys Ala Ala Lys Val Leu Glu Glu Arg lle His

Glu Glu Phe Lys Arg Lys Glu Glu Glu Glu Arg Lys Arg Gly Glu Glu Gln Ile Arg Leu Gln Glu Glu Gln Arg Ala Lys Glu Leu Tyr Trp Thr Leu Lys Gln Ala Gln Leu His Cys Gln Ala Ser Glu Lys Glu Glu Arg Glu Trp Glu Glu Gln Leu Arg Arg Ser Lys Ala Ala Asp Glu Glu Arg Ser Arg Arg Ala Gln Arg Ala Arg Asp Glu Tyr Arg His His Ser Leu Arg Ala Ile Gln Lys Gly Thr Val Ala Gly Leu Ser Ser Met Phe Arg Glu Leu Gly Gln Ser His Glu Gln Glu Ala Arg Leu Tyr His His Leu Pro Asp Pro Gly Leu Pro Gln Pro Leu Ala Leu Pro Val Ser Arg Thr Trp Glu Arg Pro Leu Arg Pro Val Ser Arg Asp Val Ile Val Arg Trp Phe Lys Glu Glu Gln Leu Pro Arg Arg Ala Gly Phe Glu Arg Asn Thr Lys Phe Ile Ala Pro Trp Phe His Gly Gly Asn Tyr His Cys Phe Arg Arg Arg Val Thr Ser Gly Thr Leu Arg Thr Glu Gly Gln Pro Thr Arg Leu Pro Ser Val Val <210> 3457

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3457

Met Gln Ala Ser Leu Leu Ser Cys Leu Pro Leu Ser Ser Leu Ser

Thr	Val	He	Val	Pro	Pro	Phe	Leu	Gln	Val	Asn	Asp	Leu	Asp	Gly	Tyr
			20					25					30		
Asn	Arg	Thr	Ala	Leu	His	Tyr	Ala	Ala	Glu	Lys	Лѕр	Glu	Ala	Cys	Val
		35					40					45			
Glu	Val	Leu	Leu	Glu	Tyr	Gly	Ala	Asn	Pro	Asn	Ala	Leu	Λsp	Gly	Asn
	50					55					60				
Arg	Asp	Thr	Pro	Leu	His	Trp	Ala	Ala	Phe	Lys	Asn	Asn	Лlа	Glu	Cys
65					70					75					80
Val	Arg	Ala	Leu	Leu	Glu	Ser	Gly	Ala	Ser	Val	Asn	Ala	Leu	Asp	Tyr
				85					90					95	
Asn	Asn	Asp	Thr	Pro	Leu	Ser	Trp	Ala	Ala	Met	Lys	Gly	Asn	Leu	Glu
			100					105					110		
Ser	Val	Ser	lle	Leu	Leu	Asp	Tyr	Gly	Ala	Glu	Val	Arg	Val	He	Asn
		115					120					125			
Leu	Ile	Gly	Gln	Thr	Pro	Ile	Ser	Arg	Leu	Val	Ala	Leu	Leu	Val	Arg
	130					135					140				
Gly	Leu	Gly	Thr	Glu	Lys	Glu	Asp	Ser	Cys	Phe	Glu	Leu	Leu	His	Arg
145					150					155					160
Ala	Val	Gly	His	Phe	G1u	Leu	Arg	Lys	Asn	Gly	Thr	Met	Pro	Arg	Glu
				165					170					175	
Val	Ala	Arg	Asp	Pro	Gln	Leu	Cys	Glu	Lys	Leu	Thr	Val	Leu	Cys	Ser
			180					185					190		
Ala	Pro	Gly	Thr	Leu	Lys	Thr	Leu	Ala	Arg	Tyr	Ala	Val	Arg	Arg	Ser
		195					200					205			
Leu	Gly	Leu	Gln	Tyr	Leu	Pro	Asp	Ala	Val	Lys	Gly	Leu	Pro	Leu	Pro
	210					215					220				
Ala	Ser	Leu	Lys	Glu	Tyr	Leu	Leu	Leu	Leu	Glu					
225					230					235					

<210> 3458

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3458

Met Gln Gly Met Gly Leu Gly Leu Ser Ser Val Phe Ala Leu Cys Leu 10 Gly His Thr Ser Ser Phe Cys Glu Ser Val Val Phe Ala Ser Ala Ser 20 25 30 lle Gly Leu Gln Thr Phe Asn His Ser Gly Ile Ser Val Asn lle Gln 40 Asp Leu Ala Pro Ser Cys Ala Gly Phe Leu Phe Gly Val Ala Asn Thr 55 60 Ala Gly Ala Leu Ala Gly Val Val Gly Val Cys Leu Gly Gly Tyr Leu 65 70 75 Met Glu Thr Thr Gly Ser Trp Thr Cys Leu Phe Asn Leu Val Ala Ile 90 lle Ser Asn Leu Gly Leu Cys Thr Phe Leu Val Phe Gly Gln Ala Gln 100 105 110 Arg Val Asp Leu Ser Ser Thr His Glu Asp Leu 120 115

<210> 3459

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3459

Met Lys Val Lys Gln Ala Leu Met Val Thr Leu Thr Gln Gln Asp Arg

1 5 10 15

Tyr Pro Tyr Gln Lys Gly lle Ser Gly His Arg Asp Arg Ala Arg
20 25 30

Val Glu Thr Pro Glu Asp Glu Asp Gly 11e Tyr Gln Λla Gly Glu Trp 35 40 45

Pro Gln Glu Lys Arg Ala Leu Pro Thr Pro Arg Pro Arg Thr Ser Ser 50 55 60

Leu Gln Ser Arg Val Lys Arg Asn Phe His His Leu Ser Cys Pro Val 65 70 75 80

Cys Gly Thr Leu Pro Arg Gln Pro Glu Gln Thr Val Gln Ala Pro Lys

Thr Leu Ser Ala Cys Val 11e Leu Ala Arg Thr Thr Leu Pro Glu Ala 100 Thr Ala Met Ser Lys Leu Ile Val Arg Phe Leu Pro Ala Thr Trp Phe 115 Thr Ala Met Ser Lys Leu Ile Val Arg Phe Leu Pro Ala Thr Trp Phe

<210> 3460

<211> 126

<212> PRT

<213> Homo sapiens

35

<400> 3460

 Met Leu Arg Leu Arg Lys Gln Gly His Val Arg Arg Arg Gly Lys Ser

 1
 5
 10
 15

 1le Gly Glu Asn Lys Asp Thr Gly Gly Asp Ala Thr Trp Arg Ser Pro
 20
 25
 30

 Glu Ser Arg Glu Thr Asn Glu Pro Arg Thr Gln Met Ala Lys Lys
 Lys Lys

Asn Glu Arg Ile Cys Lys Arg Gln His Ser Asn Met Pro Asn Lys Ser
50 55 60

45

40

Arg Val Leu Val Phe Lys His Leu Tyr Leu Pro Arg Val Thr Arg Gln 65 70 75 80

Leu 11e Ser Phe His 11e Cys Ser Arg Phe Val Phe Arg Asn Lys Thr 85 90 95

His Val Leu Lys Ser Cys Leu Tyr Val Ala Pro Val Leu Leu Pro Pro 100 105 110

Pro Pro Val Leu Lys Ser Ile Ser Ala Leu Leu Ile Tyr Gly
115 120 125

<210> 3461

<211> 521

<212> PRT

<213> Homo sapiens

<400)> 34	161													
Met	Glu	Phe	Gly	Leu	Ser	Trp	He	Phe	Leu	Val	Val	Thr	Leu	Lys	Gly
1				5					10					15	
Val	His	Cys	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Lys
			20					25					30		
Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Val	Ala	Ser	Gly	Phe	Thr	Phe
		35					40					45			
Ser	Asn	Thr	Trp	Met	Thr	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
	50					55					60				
Glu	Trp	Val	Gly	Arg	He	Ser	Thr	Asp	Ser	Glu	Gly	Ala	Thr	Val	Asp
65					70					75					80
Tyr	Ala	Ala	Pro	Val	Lys	Gly	Arg	Phe	Thr	lle	Ser	Arg	Asp	Asp	Ser
				85					90					95	
Lys	Lys	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Gln	Val	Glu	Asp	Thr
			100					105					110		
Ala	Val		Tyr	Cys	Ser	Thr		Pro	Ser	Arg	Val		Gly	Thr	Gln
		115		D)	m		120	0.1	mı		., .	125			
Arg		Phe	Asp	Phe	Trp		Arg	Gly	Thr	Arg		Thr	Val	Ser	Ser
4.7	130	T)		C 1	D	135	17 1	DI	D	1	140	D	C	C	
	Ser	inr	Lys	GIY		Ser	vai	rne	rro		Ala	Pro	Cys	ser	
145	The	Con	C1 ₁₁	C1	150	Ala	Ala	Lau	Cly	155 Cvs	Lou	Vol	Luc	Aan	160
261	1111	361	Gly	165	1111	міа	ита	Leu	170	Cys	Leu	vai	LyS	175	1 y 1
Phe	Pro	Glu	Pro		Thr	Val	Ser	Trn		Ser	Glv	Ala	Len		Ser
1110	.10	O.I G	180	,	1113	101	501	185	11011	001	01,	7110	190	1111	501
G1 v	Val	His	Thr	Phe	Pro	Ala	Val		Gln	Ser	Ser	Glv		Tvr	Ser
		195					200					205		- , -	
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
	210					215					220				
Tyr	Thr	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys
225					230					235					240
Arg	Val	Glu	Leu	Lys	Thr	Pro	Leu	Gly	Asp	Thr	Thr	His	Thr	Cys	Pro
				245					250					255	
Arg	Cys	Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg
			260					265					270		

Cys	Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Cys
		275					280					285			
Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Cys	Pro
	290					295					300				
Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys
305					310					315					320
Pro	Lys	Asp	Thr	Leu	Met	He	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val
				325					330					335	
Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln	Phe	Lys	Trp	Tyr
			340					345					350		
Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu
	•	355					360					365			
Gln	Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Va]	Leu	Thr	Val	Leu	His
	370					375					380				
Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys
385					390					395					400
Ala	Leu	Pro	Ala	Pro	He	Glu	Lys	Thr	11e	Ser	Lys	Thr	Lys	Gly	G1n
				405					410					415	
Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu	Met
			420					425					430		
Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro
		435					440					445			
Ser	Asp	He	Ala	Val	Glu	Trp	Glu	Ser	Ser	Gly	Gln	Pro	Glu	Asn	Asn
	450					455					460				
Tyr	Asn	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu
465					470					475					480
Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	G1n	Gly	Asn	lle
				485					490					495	
Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	Arg	Phe	Thr	Gln
			500					505					510		
Lys	Ser	Leu	Ser	Leu	Ser	Pro	G1y	Lys							
		515					520								

<210> 3462

<211> 551

<212> F	rrt													
<213> H	lomo	sapie	ens											
<400> 3	462													
Met Ile	Ser	Pro	Asp	Pro	Arg	Pro	Ser	Pro	Gly	Leu	Ala	Arg	Trp	Ala
1			5					10					15	
Glu Ser	Tyr	Glu	Ala	Lys	Cys	Glu	Arg	Arg	Gln	Glu	He	Arg	G] u	Ser
		20					25					30		
Arg Arg	Cys	Arg	Pro	Asn	Val	Thr	Thr	Cys	Arg	Gln	Val	Gly	Lys	Thr
	35					40					45			
Leu Arg	lle	Gln	Gln	Arg	Glu	Gln	Leu	Gln	Arg	Ala	Arg	Leu	Gln	Gln
50)				55					60				
Phe Phe	Arg	Arg	Arg	Asn	Leu	Glu	Leu	Glu	Glu	Lys	Gly	Lys	Ala	Gln
65				70					75					80
His Pro	Gln	Ala	Arg	Glu	Gln	Gly	Pro	Ser	Arg	Arg	Pro	Gly	Gln	Val
			85					90					95	
Thr Val	Leu	Lys	Glu	Pro	Leu	Ser	Cys	Ala	Arg	Arg	lle	Ser	Ser	Pro
		100					105					110		
Arg Glu	Gln	Val	Thr	Gly	Thr	Ser	Ser	Glu	Val	Phe	Pro	Ala	Gln	His

ys Arg Gln Val Gly Lys Thr ln Arg Ala Arg Leu Gln Gln lu Glu Lys Gly Lys Ala Gln er Arg Arg Pro Gly Gln Val la Arg Arg Ile Ser Ser Pro lu Val Phe Pro Ala Gln His Pro Pro Pro Ser Gly 11e Cys Arg Asp Leu Ser Asp Ilis Leu Ser Ser Gln Ala Gly Gly Leu Pro Pro Gln Asp Thr Pro 11e Lys Lys Pro Pro Lys His His Arg Gly Thr Gln Thr Lys Ala Glu Gly Pro Thr lle Lys Asn Asp Ala Ser Gln Gln Thr Asn Tyr Gly Val Ala Val Leu Asp Lys Glu lle lle Gln Leu Ser Asp Tyr Leu Lys Glu Ala Leu Gln Arg Glu Leu Val Leu Lys Gln Lys Met Val Ile Leu Gln Asp Leu Leu Ser Thr Leu Ile Gln Ala Ser Asp Ser Ser Trp Lys Gly Gln Leu Asn Glu Asp Lys Leu Lys Gly Lys Leu Arg Ser Leu Glu Asn Gln Leu Tyr Thr Cys

Thr	Gln	Lys	Tyr	Ser	Pro	Trp	Gly	Met	Lys	Lys	Val	Leu	Leu	Glu	Met
			260					265					270		
Glu	Asp	Gln	Lys	Asn	Ser	Tyr	Glu	G1n	Lys	Ala	Lys	Glu	Ser	Leu	Gln
		275					280					285			
Lys	Val	Leu	Glu	Glu	Lys	Met	Asn	Ala	Glu	Gln	Gln	Leu	G1n	Ser	Thr
	290					295					300				
Gln	Arg	Ser	Leu	Ala	Leu	Ala	Glu	Gln	Lys	Cys	Glu	Glu	Trp	Arg	Ser
305					310					315					320
Gln	Tyr	Glu	Ala	Leu	Lys	Glu	Asp	Trp	Arg	Thr	Leu	Gly	Thr	Gln	His
				325					330					335	
Arg	Glu	Leu	Glu	Ser	Gln	Leu	His	Val	Leu	Gln	Ser	Lys	Leu	Gln	Gly
			340					345					350		
Ala	Asp	Ser	Arg	Asp	Leu	Gln	Met	Asn	Gln	Ala	Leu	Arg	Phe	Leu	Glu
		355					360					365			
Asn	Glu	His	Gln	Glu	Leu	Gln	Ala	Lys	He	Glu	Cys	Leu	Gln	Gly	Asp
	370					375					380				
Arg	Asp	Leu	Cys	Ser	Leu	Asp	Thr	Gln	Asp	Leu	Gln	Asp	Gln	Leu	Lys
385					390					395					400
Arg	Ser	Glu	Ala	Glu	Lys	Leu	Thr	Leu		Thr	Arg	Val	Gln	Gln	Leu
				405					410					415	
Gln		Leu		Gln	Asn	Gln	Ser		Gln	Leu	G1n	Glu		Glu	Lys
	,		420					425					430		
Leu	Leu		Lys	Lys	Asp	Gln		Leu	Pro	Val	Trp		Pro	Lys	Ser
		435					440				_	445			
Phe		Asn	Glu	Val	Glu		Glu	G1 y	Thr	Gly		Glu	Lys	Asp	Trp
	450					455					460		0.1	. 1	
	Leu	Arg	Asp	GIn		Gln	Lys	Lys	Thr		GIn	Leu	GIn	Ala	
465		0.1	~		470			-	0.1	475	6.1			C	480
Glu	Lys	Glu	Cys		GIu	Leu	His	Ser		Leu	Gly	Asn	Leu	Ser	Asp
0.1	T		6	485					490	11.	C		61	495	
GJu	lyr	Leu		Cys	Leu	Arg	Lys		GIn	HIS	Cys	Arg		Glu	Leu
	0.1	6	500	C1		D	D	505		61	C	C1	510	т.	1
Asn	GIn		ы	GIn	Leu	Pro		Arg	Arg	GIN	Cys		arg	Trp	Leu
D.	1/ 1	515	M ·	V 1	17 1	7.1	520	A 1	д 7 .	1	A 1 .	525	DI	1	Λ1
Pro	Val 530		met	val	val	11e		Ala	на	Leu	A1a 540		rne	Leu	нта
	ווא רי					7.17					23411				

Asn Lys Asp Asn Leu Met Ile 545 550

<210> 3463

<211> 1047

<212> PRT

<213> Homo sapiens

<400> 3463

Met Ala Glu Lys Arg Pro Leu Arg Thr Leu Gly Pro Val Met Tyr Gly
1 5 10 15

Lys Leu Pro Arg Leu Glu Thr Asp Ser Gly Leu Glu His Ser Leu Pro 20 25 30

His Ser Val Gly Asn Gln Asp Pro Cys Thr Tyr Lys Gly Ser Tyr Phe
35 40 45

Ser Cys Pro Met Ala Gly Thr Pro Lys Ala Glu Ser Glu Gln Leu Ala 50 55 60

Ser Trp Thr Pro Tyr Pro Pro Leu Tyr Ser Thr Gly Met Ala Gly Pro 65 70 75 80

Pro Leu Gln Ala Asp Asn Leu Leu Thr Asn Cys Leu Phe Tyr Arg Ser 85 90 95

Pro Ala Glu Gly Pro Glu Lys Met Gln Asp Ser Ser Pro Val Glu Leu 100 105 110

Leu Pro Phe Ser Pro Gln Ala His Ser Tyr Pro Gly Pro Pro Leu Ala 115 120 125

Ala Pro Lys Pro Val Tyr Arg Asn Pro Leu Cys Tyr Gly Leu Ser Thr 130 135 140

Cys Leu Gly Glu Gly Ala Val Lys Arg Pro Leu Asp Val Asp Trp Thr 145 150 155 160

Leu Ala Thr Gly Pro Leu Leu Pro Ser Ala Asp Pro Pro Cys Ser Leu 165 170 175

Ala Pro Ala Pro Ser Lys Gly Gln Thr Leu Asp Gly Thr Phe Leu Arg 180 185 190

Gly Val Pro Ala Glu Gly Ser Ser Lys Asp Ser Ser Gly Ser Phe Ser 195 200 205

Gly Ser Pro Tyr Leu Arg Gln Gln Ala Ala Gln Ala Pro Tyr lle Pro 325 330 335 Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Al	s Ser Thr Gly
225	an Sam Lua Cla
Ala Met Ser Glu Gly Pro Ser Ser Pro Trp Thr Gln Leu Ala Gln Pro 245 245 250 250 250 255 255 255 255 255 255 255 255 255 255 255 255 255 255 255 255 250 270 <	
Leu Gly Pro Pro Cys Gln Asp Thr Gly Pro Thr His Tyr Pro Pro Pro Pro All 260 His His Pro Pro Pro Glu Lys Gln Gly Ser Tyr Ser Pro Ala Leu Pro Cys Gln Ala Ser Tyr Ser Pro Ala Ser Ser Pro Cys Gly His Lys Gly Thr Gly Tyr Gln Ala Gly Gly Leu Gly Ser Tyr Ser Pro Ala Ser	
Leu Gly Pro Pro Cys Gln Asp Thr Gly Pro Thr His Tyr Pro Ala Leu Pro Cys Pro Pro Pro Ala Pro <	
His His Pro Pro Pro His Pro Pro Gln Ala Leu Pro Cys Pro Pro Ala 275 280 285	
His His Pro Pro Pro His Pro Pro Gln Ala Leu Pro Cys Pro Pro Al 275	
Cys Arg His Pro Glu Lys Gln Gly Ser Tyr Ser Pro Ala Leu Pro Leu 290 295 295 300 300 300 4 1 <	
Cys Arg His Pro Glu Lys Gln Gly Ser Tyr Ser Pro Ala Leu Pro Lee 290 295 300 Gln Pro Leu Gly Gly His Lys Gly Thr Gly Tyr Gln Ala Gly Gly Lee 305 310 315 325 Gly Ser Pro Tyr Leu Arg Gln Gln Ala Ala Gln Ala Pro Tyr 11e Pro 325 325 Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala Ala Gly Ala Pro Ala Ala Gly Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala Ala Gly Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala Ala Gly Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala Ala Gly Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala Cyr Ala Pro Leu Pro Ala Cyr Ala Cyr Ala Pro	
290	
305 310 315 326 Gly Ser Pro Tyr Leu Arg Gln Gln Ala Ala Gln Ala Pro Tyr Lle Pro 325 335 Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala	
Gly Ser Pro Tyr Leu Arg Gln Gln Ala Ala Gln Ala Pro Tyr lle Pro 325 330 335 Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Al	la Gly Gly Leu
325 330 335 Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Al	320
Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Al	o Tyr lle Pro
	335
0.40	o Leu Pro Ala
340 345 350	350
Pro Ser Pro Gly Leu Lys Leu Glu Pro Pro Leu Thr Pro Arg Cys Pr	o Arg Cys Pro
. 355 360 365	35
Leu Asp Phe Ala Pro Gln Thr Leu Ser Phe Pro Tyr Ala Arg Asp As	la Arg Asp Asp
370 375 380	
Leu Ser Leu Tyr Gly Ala Ser Pro Gly Leu Gly Gly Thr Pro Pro Se	nr Pro Pro Ser
	400
Gln Asn Asn Val Arg Ala Val Pro Gln Pro Gly Ala Phe Gln Arg Al	ne Gln Arg Ala
405 410 415	
Cys Gln Pro Leu Pro Ala Ser Gln Pro Cys Ser Glu Pro Val Arg Pr	
420 425 430	
Ala Glu Glu Lys Thr Trp Leu Pro Ser Cys Arg Lys Gl	
435 440 445	
Lys Leu Gln Pro Arg Leu Ser Glu His Ser Gly Pro Pro Ile Val II	o He val He
450 455 460	an Dun Cua Ala
Arg Asp Ser Pro Val Pro Cys Thr Pro Pro Ala Leu Pro Pro Cys Al 465 470 475 48	ro Pro Cys Ala 480
Arg Glu Cys Gln Ser Leu Pro Gln Lys Glu Asp Ala Arg Pro Pro Se	
485 490 495	

Ser	Pro	Pro	Met	Pro	Val	He	Asp	Asn	Val	Phe	Ser	Leu	Ala	Pro	Tyr
			500					505					510		
Arg	Asp	Tyr	Leu	Asp	Val	Pro	Ala	Pro	Glu	Ala	Thr	Thr	Glu	Pro	Asp
		515					520					525			
Ser	Ala	Thr	Ala	Glu	Pro	Asp	Ser	Ala	Pro	Ala	Thr	Ser	Glu	Gly	G1n
	530					535					540				
Asp	Lys	Gly	Cys	Arg	Gly	Thr	Leu	Pro	Ala	Gln	Glu	Gly	Pro	Ser	Gly
545					550					555					560
Ser	Lys	Pro	Leu	Arg	Gly	Ser	Leu	Lys	Glu	Glu	Val	Ala	Leu	Asp	Leu
				565					570					575	
Ser	Val	Arg	Lys	Pro	Thr	Ala	Glu	Ala	Ser	Pro	Val	Lys	Ala	Ser	Arg
			580					585		•			590		
Ser	Val	Glu	His	Ala	Lys	Pro	Thr	Ala	Ala	Met	Asp	Val	Pro	Asp	Val
		595					600					605			
Gly	Asn	Met	Val	Ser	Asp	Leu	Pro	Gly	Leu	Lys	Lys	lle	Asp	Thr	G] u
	610					615					620				
Ala	Pro	Gly	Leu	Pro	Gly	Val	Pro	Va]	Thr	Thr	Asp	Ala	Met	Pro	Arg
625					630					635					640
Thr	Asn	Phe	His	Ser	Ser	Va]	Ala	Phe	Met	Phe	Arg	Lys	Phe	Lys	Ile
				645					650					655	
Leu	Arg	Pro	Ala	Pro	Leu	Pro	Ala	Ala	Val	Val	Pro	Ser	Thr	Pro	Thr
			660					665					670		
Ser	Ala	Pro	Ala	Pro	Thr	Gln	Pro	Ala	Pro	Thr	Pro	Thr	Ser	Gły	Pro
		675					680					685			
He	Gly	Leu	Arg	He	Leu	Ala	Gln	Gln	Pro	Leu	Ser	Val	Thr	Cys	Phe
	690					695					700				
Ser	Leu	Ala	Leu	Pro	Ser	Pro	Pro	Ala	Val	Ala	Val	Ala	Ser	Pro	Ala
705					710					715					720
Pro	Ala	Pro	Ala	Pro	Ser	Pro	Ala	Pro	Ala	Arg	Ala	Gln	Ala	Pro	Ala
				725					730					735	
Ser	Ala	Arg	Asp	Pro	Ala	Pro	Ala	Pro	Ala	Pro	Val	Ala	Gly	Pro	Ala
			740					745					750		
Pro	Ala	Ser	Thr	Ser	Ala	Pro	GLy	Asp	Ser	Leu	Glu	Gln	His	Phe	Thr
		755					760					765			
Gly	Leu	His	Ala	Ser	Leu	Cys	Asp	Ala	11e	Ser	Gly	Ser	Val	Ala	His
	770					775					780				

Ser	Pro	Pro	Glu	Lys	Leu	Arg	61u	Irp	Leu	Glu	Ihr	Ala	Gly	Pro	Erp
785					790					795					800
Gly	Gln	Ala	Ala	Trp	Gln	Asp	Cys	Gln	Gly	Val	Gln	G1y	Leu	Leu	Ala
				805					810					815	
Lys	Leu	Leu	Ser	Gln	Leu	Gln	Arg	Phe	Asp	Arg	Thr	His	Arg	Cys	Pro
			820				•	825					830		
Phe	Pro	His	Val	Val	Arg	Ala	Glv	Ala	lle	Phe	Val	Pro	11e	His	Leu
		835					840					845			
Val	Lvs		Arg	Leu	Phe	Pro		Leu	Pro	Pro	Ala		Val	Asp	His
	850					855	Ü				860			•	
Val		Gln	Glu	His	Arg		Glu	Leu	Arg	Pro		Thr	Leu	Ser	Glu
865					870				0	875					880
	Arg	Ala	Leu	Arg		Leu	Ala	Leu	Pro		Cvs	Thr	Ser	Arg	
	0			885					890	•	•			895	
Leu	Lvs	Leu	Leu		Leu	Arg	Gln	Leu		Asp	He	Tvr	Pro		l.eu
	-7-		900			6		905				- • -	910		
Leu	G1 v	Leu	Gln	Trp	Arg	Asp	Cvs		Arg	Arg	Gln	Leu		Asp	Phe
	01,	915			0		920		0	8		925	,		
Asp	Thr		Ala	Glv	Ala	Val		Ser	Ser	Glu	Pro		Val	Ala	Arø
	930			,		935					940				0
Asp		Pro	Glu	Ser	Leu		Leu	Ala	Gln	Lvs		Pro	Ala	Pro	Lys
945					950					955					960
	Arg	Lvs	Pro	Glv		Lys	Pro	Pro	Thr		Glv	Pro	Glu	l.vs	
	6			965	0	13.0			970		0.,		0.20	975	
Glu	Ala	Ala	Ala		Glu	Glu	Ser	Cvs		Ala	Ser	Pro	Thr		Ala
			980	·.,	0.4			985	0.,				990		
Thr	Ser	Ala	Ser	Pro	Pro	Glv	Pro		Len	Lys	Ala	Arg		Arg	Ser
		995	00.				1000	• • • • • • • • • • • • • • • • • • • •		•		1005		0	
Leu	Leu		Thr	Ala	Trn			Glv	Leu	Ala			Thr	Trp	Glv
	1010					1015					1020				~ - ,
		Ser	Ser	Arø			Gln	Pro	Ser			Pro	Gln	Len	Leu
1025			~ ···		1030					1035					1040
		Gln	Ser			Leu									
				1045											

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<211> 358
<212> PRT
<213> Homo sapiens
<400> 3464
Met Gln Arg Ser Pro His Ala Ala Glu Thr Gly Val Pro Thr Gly Ser
                                                         15
                                     10
Ala Lys Val Thr Thr Gln Gln Arg Gln Ala Ser Cys Gly Gln Cys
                                 25
Arg Gly His His His Ala Ala Glu Thr Gly Val Leu Trp Ala Val Gln
                            40
                                                45
Arg Ser Pro Pro Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu
    50
                                             60
                         55
Val Thr Pro Arg Ser Arg Asp Arg Pro Val Gly Asp Ala Glu Val
Thr Thr Gln Gln Arg Arg Ala Ser Pro Gln Ala Val Gln Arg Ser
                 85
                                     90
Pro Pro Arg Ser Arg Asp Arg Pro His Gly Gln Cys Lys Gly His
            100
                                105
                                                    110
His His Thr Ala Glu lle Gly Val Leu Trp Ala Met Gln Arg Ser Pro
                           120
                                                125
Pro Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu Val Thr Pro
    130
                        135
Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu Val Thr Thr
Gln Gln Arg Arg Ala Ser Pro Gln Ala Val Gln Arg Ser Pro Pro His
                165
                                    170
Ser Arg Asp Arg Pro His Gly Gln Cys Arg Gly His His His Ala
            180
                                185
                                                    190
Ala Glu Thr Gly Val Pro Thr Gly Ser Ala Glu Val Thr Thr Thr Gln
                           200
                                               205
Gln Arg Gln Ala Ser Cys Gly Gln Cys Arg Gly His His His Ala Ala
    210
                        215
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Glu Thr Gly Val Leu Trp Ala Val Gln Arg Ser Pro Pro Arg Ser Arg

<210> 3464

225	230	235	240
Asp Gly Arg Pro	His Arg Gln Cy	s Arg Gly His His His	Thr Ala Glu
	245	250	255
Thr Gly Val Leu	Trp Ala Val Gl	n Arg Ser Pro Pro Arg	Ser Arg Asp
260		265	270
Arg Arg Pro Val	Gly Ser Ala Gl	ı Val Thr Thr Leu Ser	Gln Thr Val
275	286	285	
Leu Gly Leu Pro	Trp Val Glu Hi	s Arg Met Lys Thr Met	Cys Phe Glu
290	295	300	
Pro Trp Lys Asp	Asn Gln Pro Se	r Gln Ser Gln Ser Leu	Lys Gln Ala
305	310	315	320
Ala Pro Arg Ala	Gln Leu Gln Gl	ı Ala Ala Ser Ser Arg	Gly Leu Gln
	325	330	335
Gln Gly Gly Gly	Arg Cys Val Pr	o Ser Val Ala Ser Trp	Cys Pro Leu
340		345	350
Met Ser Arg Ser	Val Arg		
355			

<210> 3465

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3465

Met Ser Arg Ser Val Leu Glu Ala Leu Thr Ser Ser Thr Ala Met Gln 10 Cys Val Pro Ser Asp Gly Cys Ala Met Leu Leu Arg Val Arg Ala Ser 20 25 30 lle Thr Leu His Glu Arg Leu Arg Gly Leu Glu Ala Cys Ala Met Ser 35 40 45 Leu Asp Thr Gln Glu Thr Gln Cys Gln Ser Val Trp Val Ala Arg Ala 55 60 Ser His Arg Gln Gln Arg Gly Arg Gln Leu Gln Val His Phe Gly Cys 65 70 75 80 Phe Ala Val Ser Val Ala Gln His Leu Tyr Val Thr Leu Arg Thr Ile

				85					90					95	
Pro	His	Phe	Cys	Gly	Val	Gln	Leu	Asp	Gln	Arg	His	Leu	Val	Glu	Ala
			100					105					110		
Gly	Lys	Leu	Ser	Tyr	Trp	Val	Asp	Arg	Arg	Arg	Lys	Ala	He	Leu	Val
		115					120					125			
Gln	Val	Pro	Arg	Ala	Ser	Gly	Ser	Pro	Asp	Tyr	Tyr	Leu	Arg	Leu	Cys
	130					135					140				
Leu	Lys	Arg	Phe	Thr	Cys	Glu	Asp	Ala	Gly	Ala	Pro	Val	Arg	Val	Thr
145					150					155					160
Ala	Asn	Ser	Val	Pro	Gln	Ala	Val	Phe	Leu	Pro	Tyr	Ser	Gln	Glu	Leu
				165					170					175	
Pro	Cys	Leu	Cys	Leu	Glu	G1 y	Trp	Ser	Ala	Thr	Pro	Asp	Ala	Val	Arg
			180					185					190		
lle	Gln	He	Cys	Pro	Phe	Glu	Asn	Asp	Thr	Glu	Ala	Leu	Glu	Val	Leu
		195					200					205			
Trp	Asp	Thr	Val	Tyr	Tyr	His	Pro	Glu	Ser	Gln	Thr	Leu	Ser	Trp	Glu
	210					215					220				
Pro	Ala	Cys	Pro	Val	Ser	Gly	His	Val	Ser	Leu	Cys	Trp	Arg	Pro	Gly
225					230					235					240
Pro	Gly	Ala	Gly	Cys	Arg	Lys	Leu	Gln	Gln	Ser	Ser	Gln	Leu	Val	His
				245					250					255	
Arg	Arg	Va]	Gln	Tyr	Pro	Leu	Va]	Asp	Thr	Gln	Pro	Gln	Leu	Cys	Leu
			260					265					270		
Lys	Phe	Ser	Thr	Ser	Trp	Gly	Ser	Trp	Val	Arg	Cys	Pro	Phe	Glu	Gln
		275					280					285			
Arg	۸rg	Phe	Pro	Thr	Pro	Pro	Thr	Ser	Arg	Cys	Thr	Cys	Val	Thr	Gly
	290					295					300				
Gly	Ser	His	Ser	Ser	Leu	Pro	Ala	Asn	Ala	His	Ser	Arg	Pro	Ala	Arg
305					310					315					320
Ser	Leu	Gln	Pro		Val	Thr	Trp	Gln		Pro	Leu	Leu	Leu		Ser
				325					330					335	

<210> 3466

<211> 295

<212> PRT

<213> Homo sapiens

<400)> 34	166													
Met	Ala	Val	Met	Ala	Pro	Arg	Thr	Leu	Val	Leu	Leu	Leu	Ser	Gly	Ala
1				5					10					15	
Leu	Ala	Leu	Thr	Gln	Thr	Trp	Ala	Gly	Ser	llis	Ser	Met	Arg	Tyr	Phe
			20					25					30		
Tyr	Thr	Ser	Val	Ser	Arg	Pro	Gly	Arg	G1 y	Glu	Pro	Arg	Phe	He	Ala
		35					40					45			
Val	Gly	Tyr	Val	Asp	Asp	Thr	Gln	Phe	Val	Arg	Phe	Лѕр	Ser	Asp	Ala
	50					55					60				
Ala	Ser	Gln	Arg	Met	Glu	Pro	Arg	Ala	Pro	Trp	He	G] u	Gln	Glu	Gly
65					70					75					80
Pro	Glu	Tyr	Trp	Asp	Arg	Asn	Thr	Arg	Asn	Val	Lys	Ala	His	Ser	Gln
				85					90					95	
Thr	Asp	Arg	Arg	Tyr	Leu	Glu	Asn	Gly	Lys	Glu	Thr	Leu	Gln	Arg	Thr
			100					105					110		
Asp	Ala	Pro	Lys	Thr	His	Met	Thr	His	His	Ala	Val	Ser	Asp	His	Glu
		115					120					125			
Ala	Thr	Leu	Arg	Cys	Trp	Ala	Leu	Ser	Phe	Tyr	Pro	Ala	Glu	He	Thr
	130					135					140				
Leu	Thr	Trp	Gln	Arg	Asp	Gly	Glu	Asp	Gln	Thr	Gln	Asp	Thr	Glu	Leu
145					150					155					160
Val	Glu	Thr	Arg	Pro	Ala	Gly	Asp	Gly	Thr	Phe	Gln	Lys	Trp	Ala	Ser
				165					170					175	
Val	Val	Val	Pro	Ser	Gly	Gln	Glu	Gln	Arg	Tyr	Thr	Cys	His	Val	Gln
			180					185					190		
His	Glu	Gly	Leu	Pro	Lys	Pro	Leu	Thr	Leu	Λrg	Trp	Glu	Pro	Ser	Ser
		195					200					205			
Gln	Pro	Thr	He	Pro	He		Gly	He	He	Ala	Gly	Leu	Val	Leu	Phe
	210					215					220				
Gly	Ala	Val	He	Ala	Gly	Ala	Val	Va]	Ala	Ala	Val	Met	Trp	Arg	Arg
225					230					235					240
Lys	Ser	Ser	Gly	_	Glu	Gly	Met	Lys		G1 y	Ser	G] u	Пe		Cys
				245					250					255	
Leu	Thr	Glu	Gly	Ser	Lys	Thr	Gln	Val	Glu	Val	Cys	Pro	Ala	Ser	Leu

Leu Gly Ser Thr lle His Asn Tyr Glu Pro Thr Gln Pro Gly Pro Cys Val Pro Ala Leu Thr Leu Leu <210> 3467 <211> 368 <212> PRT <213> Homo sapiens <400> 3467 Met Glu Gly Leu Val Phe Leu Asn Ala Leu Ala Thr Arg Leu Leu Phe Leu Leu His Ser Leu Val Gly Val Trp Arg Val Thr Glu Val Lys Lys Glu Pro Arg Tyr Trp Leu Leu Ala Leu Leu Asn Leu Leu Leu Phe Leu Glu Thr Ala Leu Thr Leu Lys Phe Lys Arg Gly Arg Gly Tyr Lys Trp Phe Ser Pro Ala Ile Phe Leu Tyr Leu Ile Ser Ile Val Pro Ser Leu Trp Leu Leu Glu Leu His His Glu Thr Gln Tyr Cys Ser Ile Gln Ala Glu Gly Thr Ser Gln Asn Thr Ser Arg Lys Glu Asp Phe Asn Gln Thr Leu Thr Ser Asn Glu Gln Thr Ser Arg Ala Asp Asp Leu lle Glu Thr Ala Lys Val Phe Val Asn Asn Leu Ser Thr Val Cys Glu Lys Val Trp Thr Leu Gly Leu His Gln Thr Phe Leu Leu Met Leu Ile Ile Gly Arg Trp Leu Leu Pro Ile Gly Gly Gly Ile Thr Arg Asp Gln Leu Ser Gln

Leu Leu Met Phe Val Gly Thr Ala Ala Asp lle Leu Glu Phe Thr

		180					185					190		
Glu	Thr	Leu	Glu	Glu	Gln	Asn	Val	Arg	Asn	Ser	Pro	Ala	Leu	Val
	195					200					205			
Ala	11e	Leu	Val	11e	Trp	Thr	Trp	Ser	Met	Leu	Gln	Phe	Pro	Leu
210					215					220				
Leu	Ala	Val	Gln	Asn	Val	Val	Cys	Pro	Val	Ser	Val	Thr	G1u	Arg
				230					235					240
Phe	Pro	Ser	Leu	Phe	Phe	Cys	Gln	Tyr	Ser	Ala	Asp	Leu	Trp	Asn
			245					250					255	
Gly	He	Ser	Val	Phe	Ile	Gln	Asp	Gly	Pro	Phe	Leu	Val	Val	Arg
		260					265					270		
He	Leu	Met	Thr	Tyr	Phe	Lys	Val	He	Asn	Gln	Met	Leu	Val	Phe
	275					280					285			
Ala	Ala	Lys	Asn	Phe	Leu	Val	Val	Val	Leu	Gln	Leu	Tyr	Arg	Leu
290					295					300				
Val	Leu	Λla	Leu	Ala	Val	Arg	Ala	Ser		Arg	Ser	Gln	Ser	
				310					315					320
Leu	Lys	Gly		His	Gly	Cys	Arg		Gln	Thr	Ser	Glu		Gly
Ser	Gln		Asp	Trp	Gln	Asn		Ser	Lys	Glu	Gly		Ala	He
			_											
Leu		Gly	Ser	Pro	Val		Ser	Asp	Asp	Ser		His	Thr	Pro
	355					360					365			
22. 0.	100													
o⁄ 110	: סמוכ	sapı	ens											
15 3.	162													
		Pro	Ace	Pho	Lou	Sor	Pho	Pho	Sor	Pho	lan	Pho	Pho	Pho
	Ala 210 Leu Phe Gly Ile Ala 290 Val Leu C> 341	195 Ala lle 210 Leu Ala Phe Pro Gly lle lle Leu 275 Ala Ala 290 Val Leu Leu Lys Ser Gln Leu Arg 355 0> 3468 1> 200 2> PRT 3> Homo:	Glu Thr Leu 195 Ala 11e Leu 210 Leu Ala Val Phe Pro Ser Gly 11e Ser 260 Ile Leu Met 275 Ala Ala Lys 290 Val Leu Ala Leu Lys Gly Ser Gln Arg 340 Leu Arg Gly 355 0> 3468 1> 200 2> PRT 3> Homo sapic	Glu Thr Leu Glu 195 Ala lle Leu Val 210 Leu Ala Val Gln Phe Pro Ser Leu 245 Gly Ile Ser Val 260 Ile Leu Met Thr 275 Ala Ala Lys Asn 290 Val Leu Ala Leu Leu Lys Gly Glu 325 Ser Gln Arg Asp 340 Leu Arg Gly Ser 355 0> 3468 1> 200 2> PRT 3> Homo sapiens	Glu Thr Leu Glu Glu 195 Ala lle Leu Val lle 210 Leu Ala Val Gln Asn 230 Phe Pro Ser Leu Phe 245 Gly lle Ser Val Phe 260 lle Leu Met Thr Tyr 275 Ala Ala Lys Asn Phe 290 Val Leu Ala Leu Ala 310 Leu Lys Gly Glu His 325 Ser Gln Arg Asp Trp 340 Leu Arg Gly Ser Pro 355 O> 3468 1> 200 2> PRT 3> Homo sapiens	Glu Thr Leu Glu Glu Gln 195 Ala lle Leu Val lle Trp 210 Leu Ala Val Gln Asn Val 230 Phe Pro Ser Leu Phe Phe 245 Gly lle Ser Val Phe Ile 260 lle Leu Met Thr Tyr Phe 275 Ala Ala Lys Asn Phe Leu 290 275 Val Leu Ala Leu Ala Val 310 Leu Lys Gly Glu His Gly 325 Ser Gln Arg Asp Trp Gln 340 Leu Arg Gly Ser Pro Val 355 0> 3468 1> 200 2> PRT 3> Homo sapiens	Glu Thr Leu Glu Glu Gln Asn 195	Glu Thr Leu Glu Glu Gln Asn Val 195	Simple Color Col	Glu Thr Leu Glu Glu Gln Asn Val Arg Asn 195	Glu Thr Leu Glu Glu Gln Asn Val Arg Asn Ser 195	Simple S	Clu Thr Leu Clu Clu	Glu Thr Leu Glu Glu Glu Gln Asn Val Arg Arg Clu Glu Glu Glu Glu Glu Glu Glu Glu Glu G

Phe Lys Ser Leu Arg Gln Gly Leu Ala Gln Leu Pro Arg Leu Glu Cys

Ser Gly Thr 11e Ser Ala His Cys Ser Leu Asn Leu Leu Gly Ser Ser Asp Pro Pro Thr Leu Ala Ser Ser Ile Ser Gly Thr Ala Gly Thr His 50 55 60 His His Ala Gln Leu Ile Phe Phe Phe Phe Phe Leu Arg Gln Gly Leu 70 75 Thr Leu Ser Pro Thr Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys 85 90 Asn Leu Cys Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln 105 100 110 Val Ala Gly Asn Thr Gly Val His His His Thr Arg Leu Ile Phe Val 120 125 Phe Leu Leu Glu Thr Arg Phe Cys His Val Gly Gln Thr Gly Leu Lys 135 Leu Leu IIe Ser Gly Asp Gln Pro Thr Leu Ala Ser Gln Ser Ala Gly 150 145 155 lle Thr Gly Met Ser Cys Arg Ala Gln Pro Cys Phe Pro Tyr His Leu 165 170 Ser Arg Ala Pro Cys Val Arg Gly Leu Gly Pro Leu Ser His His Lys 180 185 190 Leu Gln Arg Gly Ser Ala Ala Thr 195 200

<210> 3469

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3469

Met Ile Gln Leu Pro Pro Thr Arg Ser Leu Ser Gln His Leu Gly Ile 1 5 10 15 Gln Gly Glu Ile Trp Val Gly Thr Gln Pro Asn His Ile Thr Ala Pro 20 25 30 Glu Leu Asn Phe Ser Trp Asn Cys Ser Ser Tyr Glu Gly Glu Phe Ser 35 40 45

Ile Val Pro Thr Ser Gln Leu Ser Ser Gly His Asp Val Ser Asn Trp 55 His Gly Leu Gly Gln Ala Leu Cys Thr Ser Cys Asn Gly Val Leu Glu 70 75 65 80 Arg Ile His Leu His Phe Gln Leu Leu His Trp Gln Val Gly Val Ser 85 90 Pro Asp Ile Arg Lys Gly Leu Asn Ala Gly Gln Ser Lys Lys Asn Asp 105 110 Thr Cys Pro Phe Leu Leu Glu His Asp Gly Cys Glu Glu Asp Arg Arg 115 120 125

<210> 3470

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3470

35 40 45

I. M.A. CT., V.J. All. Ch. Th. M.A. Th. V.J. A.

Thr Arg Ala Met Gly Val Ala Gly Ile Met Thr Val Asp Leu Glu Gly
50 55 60

Met Asp Met Asp Met Asp Val Pro Glu Thr lle Met Ala Glu Thr Arg 65 70 75 80

Val Val Met Thr Ala Thr Glu Glu Glu lle Thr Glu Thr Ile Met Thr 85 90 95

Thr Glu Met Arg His Ala His Asn Ile Asp Thr Gln Gly 1le Ile Ser 100 105 110

Asp Pro Gly Ser Ser Phe Gln Met Ala Val Phe lle Lys Val Phe Gly 115 120 125

Ala Ala Leu Lys His Leu Ile Leu

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<210> 3471
<211> 168
<212> PRT
<213> Homo sapiens
<400> 3471
Met Gly Ile Ser Arg Thr Ala Pro Gln Gly Thr Gly Gly 11e 11e Leu
 1
Gln Gly Pro Leu Leu Pro Met Lys Asp Thr Arg Glu Met Leu Leu Arg
                                 25
Lys Leu Glu Leu Cys Ala Phe Asp His Leu Val Cys Pro Pro IIe Leu
         35
                             40
                                                  45
Pro Ser Glu Gly Leu Gly Glu Arg Arg Asn Ala Pro Ser Glu Gly Leu
                         55
                                             60
Gly Glu Arg Arg Asn Ala Arg Gly Arg Cys Ala Leu Gln Arg Leu Tyr
                     70
                                         75
Gln His Gln Lys Lys Ala Gly Arg Val Phe Leu Glu Glu Gly Gly Arg
Arg Pro Ala Val Ala Gly Arg Leu Ala Gly Gln Glu Arg Pro 11e Ser
                                105
Ala Val Leu Ser Ser Gly Leu Gln His Pro Thr Trp Arg Thr Pro Leu
        115
                            120
                                                 125
Pro Leu Ser Ser Thr Val Ala Leu Leu Ser Trp Cys Pro Leu Asn Ala
    130
                        135
                                             140
Tyr Leu Pro Phe Val Pro Pro Asn Leu Ser Arg Pro Pro Gln Val Thr
                    150
                                         155
                                                             160
His Phe Leu Ser Cys Ser Glu Leu
```

<210> 3472

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3472 Met Gly Trp Lys Lys lle Gln Glu Ser Ser Ala Gln lle Trp Trp Leu 1 5 10 15 Lys Glu Glu Gln Trp Pro Gln Glu Val Val Glu Gln Glu Gly Pro Arg 20 25 lle Glu Pro Arg Arg Thr Met Val Phe Lys Gly Pro Ala Lys Glu Thr 40 45 Ser Arg Arg Lys Val Lys Ser Val Val Ser Gln Lys Ser Arg Glu Lys 50 55 Val Ser Arg Asn Ser Gln Gln Cys Glu Ile Leu Leu Cys Lys Ser Ile 75 Met Val Arg Ala Arg Lys Asp Pro Leu Asp Thr Thr Arg Trp Trp Ser 85 90 Gly 11e Val Pro Arg Thr Ala Ser Met Val Cys Trp Ser Ser Gln Leu 100 105 110 Pro Val Gly Leu Arg Ser Lys Gln Gly Arg Val Gln Arg Gly Arg Leu 120 125 Glu Arg Val Ala Ala Gly Gly Gly Cys Cys Phe Leu Gly Ser His Pro 130 135 140 His Ala Pro Thr Gly Cys His Ser Ala Trp Phe Pro Cys Leu Ala Pro 150 155 Leu Leu Pro Leu Pro Ser Ser Gly Leu Gln Asp Gly Leu Asp Ser Gly 170 165 Leu Ser Gly Tyr 11e Asp Leu Asn Lys Ser Pro Lys Phe

<210> 3473

<211> 200

<212> PRT

<213> Homo sapiens

180

<400> 3473

Met Pro Arg Gly Leu Ala Asp Lys Gln Gly Pro Glu Glu Cys Asp Ala

1 5 10 15

Val Ala Leu Leu Ser Leu Ile Asn Ser Cys Asp His Phe Val Val Asp 25 Arg Lys Lys Val Thr Glu Val 11e Lys Cys Arg Asn Glu Ile Met His 40 45 35 Ser Ser Glu Met Lys Val Ser Ser Thr Trp Leu Arg Asp Phe Gln Met 55 60 Lys lle Gln Asn Phe Leu Asn Glu Phe Lys Asn Ile Pro Glu lle Val 70 75 Ala Val Tyr Ser Arg Ile Glu Gln Leu Leu Thr Ser Asp Trp Ala Val 85 90 His Ile Pro Glu Glu Asp Gln Arg Asp Gly Cys Glu Cys Glu Met Gly 105 Thr Tyr Leu Ser Glu Ser Gln Val Asn Glu lle Glu Met Gln Leu Leu 115 120 125 Lys Glu Lys Leu Gln Glu 11e Tyr Leu Gln Ala Glu Glu Gln Glu Val 130 135 140 Leu Pro Glu Glu Leu Ser Asn Arg Leu Glu Val Val Lys Glu Phe Leu 150 155 Arg Asn Asn Glu Asp Leu Arg Asn Gly Leu Thr Glu Asp Met Gln Lys 170 165 175 Leu Asp Ser Leu Cys Leu His Gln Lys Leu Asp Ser Gln Glu Pro Gly 185 190 Arg Gln Thr Pro Asp Arg Lys Ala 195 200

<210> 3474

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3474

Met Asp Gly Arg Ala Ala Gly Gly Arg Gly Gly Phe Leu Arg Arg

1 5 10 15

Glu Val Gly Ser Leu Gln Pro Pro Ser His Cys Pro His Pro Thr Val

20 25 30

Trp Leu Leu Pro Gly Leu Ser Phe Pro Ile Cys Glu Thr Gly Glu Met Gly Ser Leu Ser Gly Pro Arg Ser Ile Leu Met Gly Val Arg Ala Trp Gln Gly Leu Cys Arg Leu Gly Ser Glu Leu Gly Arg Pro Gly Cys Val Ala Thr Gly Val Ser Ala Pro Thr Ser Pro Phe Glu Thr Cys Pro Ala Phe Leu Phe Ala Ala Ala Thr Ala Val Arg Phe Ala Thr Arg Ser Cys Gly Cys Pro Pro Arg Gln Gly Asp

<210> 3475

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3475

Met Glu Pro Leu Asn Ser Ala Val Phe Asn Leu Arg Glu Asp Arg Val Gly Gln Phe Ser Trp Gln Gln Leu Arg Glu Gly Glu Ser Arg Glu Gln Gly Ser Asp Lys Val Cys Leu Ala Gly Ser Lys His Phe Met Glu Trp Arg Pro Leu Ala Val Arg Asp Leu Arg Lys Ile Cys Gln Gly Leu Leu His Ser Glu Gly Leu Gln Phe Gly Trp Leu Gly Thr Leu Leu Pro Cys Thr Asp Gly Ala Pro lle Ser Met Thr Arg Val Leu Val Gln Thr Gln Phe Ile Val Phe Thr Asn Ser Met His Ser Asn Gln Thr Glu lle Glu

lle Gln Tyr Asn lle Lys Gly Asp Leu Gly Gln Ala Gln Trp Leu lle

Leu Val 11e Pro Ala Leu Trp Asp Ala Glu Leu Gly Gly Ser Leu Glu
130

Ala Arg Ser Leu Gly Pro Ala Trp Ala Arg Lys
145

150

155

<210> 3476

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3476

Met lle Ser Val His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser 1 5 10 15

Pro Ala Leu Ala Ser Gl
n 11e Ala Gly 11e Thr Gly Met His His 20 25 30

Ala Arg Gln lle Phe Ile Phe Leu lle Glu Thr Gly Phe His His Val 35 40 45

Asp Gln Ala Gly Leu Lys Leu Leu Ala Ser Ser Tyr Leu Pro Ala Leu 50 55 60

Ala Ser Gln Ser Phe Gly 11e Thr Gly Val Ser His Arg Ala Trp Pro 65 70 75 80

Pro Leu Asn Thr Leu Lys Met Ser Gln Cys Ile Leu Val Ser Ile Phe
85 90 95

Tyr lle Gly Lys Phe Val Val Asn Leu lle Leu lle Pro Val His Leu 100 105 110

Val

<210> 3477

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3477

Met Leu Met Val Leu Phe Lys Tyr Trp Phe Val Ser Phe Gly Asp Val Leu Val Phe Gln Gly Tyr Asp Cys Pro Asp Asn Gly Ser Ser Met Glu Phe Leu Leu IIe Gly Ser Leu Pro Ser Thr Leu IIe Lys Ser IIe Phe Cys Leu Phe Val Leu Arg Gln Ser Phe Ala Leu Val Ala Gln Ala Gly Val Arg Trp Cys Asp Leu Gly Ser Ala Gln Pro Leu Pro Pro Gly Phe Lys Leu Val Ser Cys Leu Gly Leu Pro Ser Ser Trp Asp Tyr Arg His Ala Pro Pro Arg Leu Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr

<210> 3478

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3478

Met Trp Trp Pro Leu Ala Gly Met Thr Asp Ser Glu Val lle Thr His Ser His Cys Asn Cys His Ser Val Ala Ser Phe Ser Gln Gly Gln Gly Pro Gly Glu Arg Thr Gly Trp Gln Pro Ala Ala Gln Leu Glu Met Arg Ser Leu Ser Phe Ser Ser Tyr Leu Met Glu Ala Ser Gln Met Gln Asp Gly Ser Ser Arg Pro Ser IIe Thr Ser Ser Gln Cys Pro Lys Ala Arg Arg Glu Ala Val Val Phe Lys Ser Arg Lys Thr Phe Leu Asn Leu Ala

Arg Ile Ala Ser Gln Thr Leu Ser 100

<210> 3479

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3479

Met Glu Ala Gln Ser Cys Glu Gln Glu Thr Thr Ala Arg Arg Asn Gly

1 5 10 15

Gly Ala Arg Ser Leu Lys Gly Asn Ala Ala Gly Gly Val Val Lys Asp 20 25 30

Asn Ile Cys Phe Gly Ala Thr Ser Gly Ala Val Thr Lys Lys Pro Ser 35 40 45

Thr Leu Arg Lys Lys Glu Lys Phe Gly Tyr Arg Glu Thr Pro Cys Ser 50 55 60

Lys Cys Cys Asp Ser Lys Thr Ala Gly Phe Ala Pro Leu Ala Lys Glu 65 70 75 80

Pro Thr Glu Thr Pro Gly Ala Ala Thr Ala Lys Pro Ala Leu Glu Gly
85 90 95

Leu Gly Trp Arg Lys Pro Arg Thr Glu Thr Arg Lys Leu Cys Thr Ala 100 105 110

Arg Leu Ala Val Asp Thr Asn Arg Lys Val Ser Arg Leu Leu Ser Gly
115 120 125

Arg Lys Arg Gly Ser Lys Pro Ala Thr Gln Trp Arg Glu Pro Arg Ser 130 135 140

His

145

<210> 3480

<211> 240

<212> PRT

<213> Homo sapiens

<400)> 34	180													
Met	Gly	Leu	His	Leu	Trp	Ala	Ala	Gly	Pro	Gly	Thr	His	Pro	Ala	Gly
l				5					10					15	
Пе	Ser	Asp	Leu	Leu	Ala	Glu	Val	Ser	Ala	Glu	Val	Asp	Gly	Pro	Val
			20					25					30		
Pro	Gly	Tyr	Leu	Ser	Ser	Pro	Gln	Ser	11e	Thr	Asp	Thr	Cys	Leu	Tyr
		35					40					45			
lle	Phe	Thr	Ser	Gly	Thr	Thr	Gly	Leu	Pro	Lys	Ala	Ala	Arg	He	Ser
	50					55					60				
His	Leu	Lys	Ile	Leu	Gln	Cys	Gln	Gly	Phe	Tyr	Gln	Leu	Cys	Gly	Val
65					70					75					80
His	Gln	Glu	Asp	Va]	lle	Tyr	Leu	Ala	Leu	Pro	Leu	Tyr	His	Met	Ser
				85					90					95	
Gly	Ser	Leu	Leu	Gly	He	Val	Gly	Cys	Met	Gly	11e	Gly	Ala	Thr	Val
			100					105					110		
Val	Leu	Lys	Ser	Lys	Phe	Ser	Ala	Gly	Gln	Phe	Trp	Glu	Asp	Cys	Gln
		115					120					125			
Gln	His	Arg	Val	Thr	Val	Phe	Gln	Tyr	lle	Gly	Glu	Leu	Cys	Arg	Tyr
	130					135					140				
Leu	Val	Asn	Gln	Pro	Pro	Ser	Lys	Ala	G] u	Arg	G1 y	His	Lys	Val	Arg
145					150					155					160
Leu	Ala	Val	Gly	Ser	Gly	Leu	Arg	Pro	Asp	Thr	Trp	Glu	Arg	Phe	Val
				165					170					175	
Arg	Arg	Phe	Gly	Pro	Leu	Gln	Val	Leu	Glu	Thr	Tyr	Gly	Leu	Thr	Glu
			180					185					190		
Gly	Asn	Val	Ala	Thr	He	Asn	Tyr	Thr	Gly	Gln	Arg	Gly	Ala	Val	Gly
		195					200					205			
Arg	Ala	Ser	Trp	Leu	Tyr	Lys	G1 u	Ser	Gln	Phe	Gly	Thr	Pro	Arg	Gly
	210					215					220				
	Val	Trp	Pro	His		Gln	Val	Ser	Gln		Cys	Trp	Trp	Pro	
225					230					235					240

<210> 3481

〈211〉 164

<212> PRT

<213> Homo sapiens

<400> 3481

Met Leu Leu Thr Thr Leu Thr His Phe Phe Phe Phe Phe Phe Leu

1 5 10 15

Arg Gln Ser Leu Thr Leu Ser Ala Trp Leu Glu Cys Ser Gly Thr 11e 20 25 30

Ser Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asn Ser Pro Ala 35 40 45

Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys His His Ala Arg 50 55 60

Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His His Val Gly Glu
65 70 75 80

Ala Gly Leu Glu Leu Leu Thr Ser Gly Asn Pro Pro Ala Ser Ala Ser 85 90 95

Gln Ser Ala Gly Ile Thr Ser Val Ser His Arg Ala Arg Pro Thr Val 100 105 110

Phe Lys Ser Val Glu Thr Ser Phe Pro Leu Met Pro Cys Ser Arg Ala 115 120 125

Asp Tyr Asn Ser His His Ala Trp Gln Pro Leu Gly Pro Arg Phe Arg 130 135 140

Thr Ser Leu Thr Arg Phe Thr Ser Pro Gly Ile Leu Arg Cys Phe Pro 145 150 155 160

Asn Ser Pro Ala

<210> 3482

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3482

Met Pro Val Cys Pro Cys Leu His Leu Phe Phe Ser Phe Phe Phe Phe I 5 10 15

Cys Phe Leu Arg Trp Ser Phe Ala Leu Ser Pro Arg Leu Glu Cys Ser 25 Gly Ala Ile Leu Ala Arg Cys Ser Leu His Leu Pro Gly Ser Ser Asp 35 40 45 Ser Pro Ala Ser Ala Ser Arg Val Ala Gly lle Thr Gly Met Cys Tyr 55 60 His Thr Trp Leu Ile Leu Val Phe Leu Ile Glu Thr Gly Phe His His 70 75 Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Pro Ala 85 90 Leu Ala Ser Gln Ser Val Gly Ile Thr Gly Leu Ser His Pro Ala Arg 105 Pro Asn Ala Ser Ile Leu Phe Leu Asp Ala Phe His Ser Lys Trp 115 120 125 .

<210> 3483

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3483

Met Ser His Val Ile Trp Thr Leu Lys Met Glu Cys Ser Glu Thr His

1 5 10 15

Val Gln Gly Ser Cys Ala Lys Leu Met Ser Arg Thr Gly Leu Leu Met
20 25 30

Lys Leu Ser Glu Gln Gln Glu Ala Lys Ala Leu Asn Val Glu Trp 35 40 45

Asp Thr Asp Gln Gln Lys Thr Asn Tyr lle Asn Glu Asn Met Glu Gln
50 55 60

Asn Glu Gln Lys Glu Gln Lys Ser Ser Glu Leu Met Lys Glu Val Pro
65 70 75 80

Gly Tyr Asp Tyr Lys Asn Lys Leu lle Phe Ala lle Ser Val Thr Val
85 90 95

Ile Leu Ile Ile Leu Ile Ile Ile Phe Cys Phe Ile Glu Val Lys Thr 100 105 110 lle lle Asn Ser Gly Phe Gln Asn Thr lle Leu Cys Leu Cys Gly Phe Arg lle His Lys Leu Lys Thr Asn Val Thr Phe Pro Leu Asp Ile Leu Leu Leu Ser Phe Lys Ala Glu Val Cys Phe Val Leu Leu Leu Gln Cys lle Phe Gln Asp Cys

<210> 3484 <211> 405 <212> PRT

<213> Homo sapiens

<400> 3484 Met Ser Ser Val Lys Thr Pro Ala Leu Glu Glu Leu Val Pro Gly Ser Glu Glu Lys Pro Lys Gly Arg Ser Pro Leu Ser Trp Gly Ser Leu Phe Gly His Arg Ser Glu Lys 11e Val Phe Ala Lys Ser Asp Gly Gly Thr Asp Glu Asn Val Leu Thr Val Thr lle Thr Glu Thr Thr Val lle Glu Ser Asp Leu Gly Val Trp Ser Ser Arg Ala Leu Leu Tyr Leu Thr Leu Trp Phe Phe Phe Ser Phe Cys Thr Leu Phe Leu Asn Lys Tyr Ile Leu Ser Leu Leu Gly Gly Glu Pro Ser Met Leu Gly Ala Val Gln Met Leu Ser Thr Thr Val 11e Gly Cys Val Lys Thr Leu Val Pro Cys Cys Leu Tyr Gln His Lys Ala Arg Leu Ser Tyr Pro Pro Asn Phe Leu Met

Thr Met Leu Phe Val Gly Leu Met Arg Phe Ala Thr Val Val Leu Gly

Leu	Val	Ser	Leu	Lys	Asn	Val	Ala	Val	Ser	Phe	Ala	Glu	Thr	Val	Lys
				165					170					175	
Ser	Ser	Ala	Pro	lle	Phe	Thr	Val	11e	Met	Ser	Arg	Met	11e	Leu	Gly
			180					185					190		
Glu	Tyr	Thr	Gly	Leu	Leu	Val	Asn	Leu	Ser	Leu	Ιle	Pro	Val	Met	Gly
		195					200					205			
Gly	Leu	Ala	Leu	Cys	Thr	Ala	Thr	Glu	Ile	Ser	Phe	Asn	Val	Leu	Gly
	210					215					220				
Phe	Ser	Ala	Ala	Leu	Ser	Thr	Asn	Ile	Met	Asp	Cys	Leu	Gln	Asn	Val
225					230					235					240
Phe	Ser	Lys	Lys	Leu	Leu	Ser	Gly	Asp	Lys	Tyr	Arg	Phe	Ser	Ala	Pro
				245					250					255	
Glu	Leu	Gln	Phe	Tyr	Thr	Ser	Ala	Ala	Ala	Val	Ala	Met	Leu	Val	Pro
			260					265					270		
Ala	Arg	Va]	Phe	Phe	Thr	Asp	Val	Pro	Val	He	Gly	Arg	Ser	Gly	Lys
		275					280					285			
Ser	Phe	Ser	Tyr	Asn	Gln	Asp	Val	Val	Leu	Leu	Leu	Leu	Thr	Asp	Gly
	290					295					300				
Val	Leu	Phe	llis	Leu	Gln	Ser	Πle	Thr	Ala	Tyr	Ala	Leu	Met	Gly	Lys
305					310					315					320
He	Ser	Pro	Val	Thr	Phe	Ser	Val	Ala	Ser	Thr	Val	Lys	His	Ala	Leu
				325					330					335	
Ser	He	Trp	Leu	Ser	Val	He	Val	Phe	Gly	Asn	Lys	He	Thr	Ser	Leu
			340					345					350		
Ser	Ala	Val	Gly	Thr	Ala	Leu	Val	Thr	Val	Gly	Val	Leu	Leu	Tyr	Asn
		355					360					365			
Lys	Ala	Arg	Gln	His	Gln	Gln	Glu	Ala	Leu	Gln	Ser	Leu	Ala	Ala	Ala
	370					375					380				
Thr	Gly	Arg	Ala	Pro	Asp	Asp	Thr	Val	Glu	Pro	Leu	Leu	Pro	Arg	Asp
385					390					395					400
Pro	Arg	Gln	His	Pro											
				405											

<210> 3485

<211> 126

<212> PRT <213> Homo sapiens <400> 3485 Met Lys Ser Val Ala Gln Leu Val Tyr Phe Phe Gly Leu Leu Leu Leu 10 Asn Phe Val Ser Pro Lys Ser Glu Tyr Glu Ser Phe Cys Val Leu Ser 25 Leu Leu Leu Phe Phe Arg Glu Val Lys Val Val Gly Val Gln Pro Ile 35 40 45 Phe Val Tyr Phe Phe Cys Ser Ser Tyr Ile Tyr Tyr Tyr Trp Phe 55 Leu Ser Gly Asn Phe Ser Phe Thr Leu Thr Leu Ala Leu Pro Pro Ser 70 75 Ala Phe Phe Ser Trp Leu Gln Leu Ser Thr Ile Ile Cys Gly Phe Pro 90 85 Glu Gly Glu Pro Trp Trp Ser Gly Gly Gly Gly Arg Pro His Ser Lys 100 105 Ser Gly Val Val Gly Val Pro Asp Arg Val Leu Ile Gln Glu 120 125 115 <210> 3486 <211> 329 <212> PRT <213> Homo sapiens <400> 3486 Met Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Leu Phe Ser

Val Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Glu Leu Phe Pro

15

Ala	Pro	Phe	Pro	Met	Arg	Ser	Leu	Hís	Cys	Ser	Pro	Arg	Cys	Ser	Pro
65					70					75					80
Cys	Cys	Ser	Pro	Arg	Cys	Ser	Pro	Cys	Cys	Ser	Leu	His	Cys	Ser	Pro
				85					90					95	
Cys	Cys	Ser	Leu	Gln	Cys	Ser	Leu	His	Cys	Ser	Pro	His	Cys	Ser	Leu
			100					105					110		
His	Cys	Ser	Pro	Cys	Cys	Phe	Leu	His	Tyr	Ser	Pro	Cys	Cys	Ser	Leu
		115					120					125			
His	Phe	Ser	Leu	Cys	Arg	Ser	Pro	Cys	Ile	Pro	Cys	Thr	Val	Pro	Cys
	130					135				•	140				
Thr	Val	Pro	His	Ala	Val	Pro	Cys	Asn	Ala	Pro	Cys	Thr	Val	Pro	Arg
145					150					155					160
Thr	Ala	Pro	Cys	Thr	He	Pro	His	Ala	Val	Pro	Cys	Thr	Phe	Leu	Cys
				165					170					175	
Ala	Val	Pro	His	Ala	Phe	Pro	Ala	Leu	Phe	Pro	Ala	Leu	Phe	Pro	Met
			180					185					190		
Leu	Phe	Pro	Ala	Leu	Phe	Pro	Met	Leu	Phe	Pro	Ala	Pro	Phe	Pro	Met
		195					200					205			
Leu	Phe	Pro	Ala	Gly	Phe	Pro	Ala	Leu	Phe	Pro	Met	Leu	Phe	Pro	Ala
	210					215					220				
Pro	Phe	Pro	Met	Leu	Phe	Pro	Ala	Gly	Phe	Pro	Ala	Leu	Phe	Pro	Met
225					230					235					240
Leu	Phe	Pro	Ala	llis	Phe	Met	Pro	Gln	Thr	Phe	Pro	Phe	Ser	His	Gln
				245					250					255	
His	Thr	Gly	Ser	Ser	Phe	Lys	Ser	Phe	Cys	Ser	Val	Ser	Asn	His	Ser
			260					265					270		
Ser	Ala	Gly	Thr	Gly	Trp	Gly	Gln	Asp	Gly	Val	Arg	Pro	Cys	Arg	Pro
		275					280					285			
Trp	Pro	Ser	Arg	Ser	Val	Pro	Leu	Arg	Arg	Leu	Pro	Gln	Arg	His	Gly
	290					295					300				
Arg	Leu	Leu	Lys	Ala	Thr	Glu	Λrg	Ser	Thr	Cys	Trp	Thr	Pro	Thr	Thr
305					310					315					320
Arg	Ala	Thr	Pro	Ser	Cys	Gly	Cys	Pro							

<210> 3487 <211> 163

<212> PRT

<213> Homo sapiens

<400> 3487

Met 11e Glu I1e Leu Asn Lys Ser Lys Asn Cys Glu Gly Phe Ser Glu
1 5 10 15

Arg Arg Thr Gly Arg Gly 11e Trp Thr Trp Val Cys Met His Arg Pro \$20\$ \$25\$ \$30

Gly Cys Ser Arg Val Ala Asp Gl
n Gl
n His Leu Glu Asp Phe Thr Glu $$35\$ 40 45

Cys Phe Cys His Leu His Pro Ser Trp Pro Arg Pro Ala Leu Phe Pro 50 55 60

Leu Leu Leu Gln Leu Ile Phe Pro Asp Leu Val Glu Gly Leu Val Leu 65 70 75 80

Val Asn Ile Asp Pro Asn Gly Lys Gly Trp Ile Asp Trp Ala Ala Thr 85 90 95

Lys Leu Ser Gly Leu Thr Ser Thr Leu Pro Asp Thr Val Leu Ser His
100 105 110

Leu Phe Ser Gln Glu Glu Leu Val Asn Asn Thr Glu Leu Val Gln Ser 115 120 125

Tyr Arg Gln Gln Ile Gly Asn Val Val Asn Gln Ala Asn Leu Gln Leu 130 135 140

Phe Trp Asn Met Tyr Asn Ser His Phe Pro Gly Ala Leu Trp Ala Gln 145 150 155 160

Leu Val Leu

<210> 3488

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3488 Met Asn Gly Arg Leu Ser Lys Glu Asp Val Tyr Ala Ala Ser Lys His 10 15 Glu Lys Ser Ser Ser Ser Leu Phe Ile Arg Glu Met Gln Ile Lys Thr 25 20 Ala Met Arg Tyr His Leu Met Pro Val Arg Met Val Val Ile Lys Lys 40 45 Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu lle Gly Thr Leu 50 55 Leu His Cys Trp Trp Glu Gly Lys Leu Val Gln Pro Leu Trp Lys Thr 75 . Val Trp Gln Phe Thr Lys Asp Leu Val Leu Glu lle Pro Phe Asp Pro 85 90 95 Ala lle Pro Leu Leu Gly lle Tyr Pro Lys Asp Tyr Lys 100 105

<210> 3489

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3489

Met Glu Lys Asn Ile Ser Leu Tyr Glu Tyr Thr Thr Phe Cys Leu Ser

1 5 10 15

lle Tyr Pro Leu lle Gly Cys Phe Tyr Phe Phe Leu Ala lle Met Asn 20 25 30

Asn Ile Ala Val Asn Ile Cys Val Gln Gly Phe Ser Gly His Lys Phe 35 40 45

Leu Phe Phe Leu Gly 11e Tyr Leu Gly Val Glu Leu Leu Gly His 11e 50 55 60

Val 11e Leu Phe Asn Phe Leu Lys Asn Phe Pro Thr Val Leu His Gly
65 70 75 80

Gly Cys Ala lle Val Tyr Ser Tyr Gln Gln Cys Met Lys Leu Gln lle

85 90 95

Ser Pro His Pro Glu Asn Pro Phe IIe IIe Phe Cys Phe Ser Phe 100 105 110

<210> 3490

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3490

Met Val Ser Arg Pro Pro Arg Thr Pro Leu Ser Pro Ser Ser Trp Thr

1 5 10 15

Pro Ala Met Gly Leu Arg Ala Ser Arg Asn Cys Ser Arg Thr Glu Asn 20 25 30

Ala Val Cys Gly Cys Ser Pro Gly His Phe Cys lle Val Gln Asp Gly
35 40 45

Asp His Cys Ala Ala Cys Arg Ala Tyr Ala Thr Ser Ser Pro Gly Gln
50 55 60

Arg Val Gln Lys Gly Gly Thr Glu Ser Gln Asp Thr Leu Cys Gln Asn
65 70 75 80

Cys Pro Pro Gly Thr Phe Ser Pro Asn Gly Thr Leu Glu Glu Cys Gln
85 90 95

His Gln Thr Lys Cys Ser Trp Leu Val Thr Lys Ala Gly Λla Gly Thr
100 105 110

Ser Ser Ser His Trp Val Trp Trp Phe Leu Ser Gly Ser Leu Val 11e 115 120 125

Val 11e Val Cys Ser Thr Val Gly Leu 11e I1e Cys Val Lys Arg Arg 130 135 140

Lys Pro Arg Gly Asp Val Val Lys Val Ile Val Ser Val Gln Arg Lys 145 150 155 160

Arg Gln Glu Ala Glu Gly Glu Ala Thr Val 11e Glu Ala Leu Gln Ala 165 170 175

Pro Pro Asp Val Thr Thr Val Ala Val Glu Glu Thr lle Pro Ser Phe 180 185 190

Thr Gly Arg Ser Pro Asn His

<210> 3491 <211> 120 <212> PRT <213> Homo sapiens <400> 3491 Met Arg Lys Glu Lys Gln Ser Lys Ser Leu Leu Tyr Leu Leu Lys 11e 1 5 10 15 Ser Ser Leu Phe Ser Ser Thr Leu Phe His Gln His Leu Pro Ala Gln 25 Asn Phe His Asn Asp Pro 11e Leu Lys Pro Asn Ser Val Ser Arg Leu 40 45 Leu Thr Ser Thr Ile Ala Arg Thr His Glu Asn Leu Leu Ile Gln Ala 50 ' 55 His Ala Met Ala Gln Ala His Ala Glu Gln Ala Pro Leu Thr Pro Leu 70 75 80 Leu Leu Pro Ser Ala Ser Thr Ala Leu Leu Asn Arg His Val Asn Thr . 85 90 95 Gly Pro Phe Met His Arg Ser Lys Gly Ser Leu Arg Pro Lys Ala Leu 100 105 110 Cys Thr Thr Leu Cys Asp Ser Leu 115 120

<210> 3492

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3492

Met Val Ser Ala Ala Leu Ile Ser Gln Ser Leu Pro Arg Ser Pro His I 5 10 15

Ser Arg Ser Pro Pro Leu Ala Arg Ser Arg Arg Leu Pro Thr Pro Arg

20 25 30

 Ser
 Arg
 Pro
 Leu
 Arg
 Pro
 Ser
 Phe
 Leu
 Pro
 His
 Pro
 Ser
 Pro
 Arg
 A

<210> 3493

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3493

Met His Leu Leu Leu Leu Ser Ser Ser Tyr Leu Asn Leu Leu Gln Arg
1 5 10 15

Met Leu Trp Arg Leu Pro Trp Leu Ser His Val Ile His Lys Glu His
20 25 30

Ala Thr Thr Ile Gln Phe Leu Gln Pro Arg Gly Arg Glu Gln Gln Tyr 35 40 45

Leu Cys Arg Arg Arg His Ser Glu Leu Pro Ser Ala Ser Arg Asn Gln 50 55 60

lle Ser Glu Arg Arg Leu Ser Ala Tyr Leu Arg Thr lle Ser Gly Val 65 70 75 80

Thr Val Cys Ser Asp Gly Leu Ser Thr Ser Val Trp Ser Cys Leu Leu 85 90 95

Phe Arg Arg Asp Leu Asp Pro Ala Trp Met Met Glu Gly Lys Gly Leu 100 105 110

Ala Gln Gly Glu Gly

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<210> 3494
<211> 111
<212> PRT
<213> Homo sapiens
<400> 3494
Met Cys Val Cys Cys Phe lle Phe Leu Met Leu Cys Leu Gly Arg Glu
                  5
                                     10
Cys Ser Tyr Ile Tyr Val Tyr Ile Leu Tyr Ser Pro Ile Trp Glu Ser
             20
                                 25
                                                      30
Arg Ser Glu Val lle Ala Ser Ser Asp Cys Phe Ser Ser Glu Val Gly
                             40
                                                  45
Tyr His Trp Phe Thr Cys Leu Tyr Leu Asn Val Leu Pro Ser Val Glu
                         55
Ser Pro Ala Cys Gly Glu Glu Ser Leu Leu Val Met Phe Leu Phe Ser
                                          75
                     70
Val Phe Met Gly Glu Phe lle Gln Met Phe Tyr Leu Phe Gln Ser Thr
                 85
                                     90
Leu Asp Cys Ala Glu Met Ser Ser Ser Val Ala Gln Glu Lys Ala
            100
                                 105
                                                     110
<210> 3495
<211> 168
<212> PRT
<213> Homo sapiens
<400> 3495
Met Arg Leu Pro Ala Arg Leu Pro Ser Thr Ser Thr Ser Gly Ser Thr
 l
                  5
                                      10
                                                          15
Ser His Cys Arg Thr Gly Phe Trp Thr Leu Gly Val Pro Leu Pro Cys
Trp Tyr Ser Leu Ser Ser Gly Phe His Ser Thr Ser Pro Val Leu Gly
```

40

55

50

Thr Thr Ser Thr Trp Pro Thr Thr Ser Ser Arg Pro Phe Ser Cys Ser

45

Arg Tyr Cys Pro Arg Ala Pro Thr Leu Ser Cys His Pro His Ser Leu 70 75 His Thr Trp Gln Glu Gly Asp Ala Lys Pro Cys Val Leu Thr Gln Ala 90 85 95 Arg Ser Cys Leu Leu Gly Gly Glu Gly Cys Asp Arg Ala Ala Cys 100 105 Pro Gly Pro Gly Ala Arg Gly Arg Arg Ser Cys Arg Trp Pro Gly Gly 120 125 Met Glu Asn Met Pro Gln Glu Arg Ala Phe Asp Leu Ser Leu Ser Leu 140 130 135 Ala Cys Gln Trp Gly Lys Gln Arg Gly Val Gln Val Glu Gly Pro Lys 150 155 160 Asp Lys Ala Val Leu Gly Lys Pro 165

<210> 3496

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3496

Met Asp Ser Ser Tyr Leu Asp Asn Gln Gly lle Ala Pro Ser Lys Lys

1 5 10 15

Pro Met Pro Ser Tyr Lya Cya Cln Ser His Typ Ala Asp Cln Cln Thr

Pro Met Pro Ser Tyr Lys Cys Gln Ser His Trp Ala Asn Gln Gln Thr
20 25 30

Leu Ser Gln Arg Ala Pro Leu Gly Phe Thr Gly Gln Trp Thr Asn Gln
35 40 45

Arg Arg Phe Gln Ser Ala Ser His Cys Gly Thr Ala Arg His Ser Leu 50 55 60

Cys Pro Ala Arg Ser Gly Thr Phe Leu Asp Pro Val Ser Ser 11e 11e
65 70 75 80

Leu Asp Cys Gln Leu Pro Glu Val Arg Lys Leu lle Phe Tyr Phe Phe
85 90 95

Ser Leu Arg Leu Leu Asn Leu Phe Gln Leu His Leu Ser Thr Glu Leu 100 105 110 Ser Ser Tyr Gln Val Leu Arg His Ile Asn Asp Ala Asn Leu Val Pro
115
120
125
Phe Leu Val Trp Pro Asn Ser Lys Val Glu Glu Leu Gly Asn Lys Ser
130
135
140

<210> 3497

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3497

Met Lys Leu Ser Val Asn Glu Ala Gln Leu Gly Phe Tyr Leu Gly Ser 1 5 10 15

Leu Ser His Leu Ser Ala Cys Pro Gly 11e Asp Pro Arg Ser Ser Glu 20 25 30

Asp Gln Pro Glu Ser Leu Lys Thr Gly Gln Met Met Asp Glu Ser Asp
35 40 45

Glu Asp Phe Lys Glu Leu Cys Ala Ser Phe Phe Gln Arg Val Lys Lys 50 55 60

His Gly 11e Lys Glu Val Ser Gly Glu Arg Lys Thr Gln Lys Ala Ala 65 70 75 80

Ser Asn Gly Thr Gln 11e Arg Ser Lys Leu Lys Arg Thr Lys Gln Thr
85 90 95

Ala Thr Lys Thr Leu Gln Gly Pro Ala Glu Lys Lys Pro Pro
100 105 110

Ser Gly Ser Gln Ala Pro Arg Thr Lys Lys Gln Arg Val Thr Lys Trp 115 120 125

Gln Ala Ser Glu Pro Ala His Ser Val Asn Gly Glu Gly Gly Val Leu 130 135 140

Ala Ser Ala Pro Asp Pro Pro Val Leu Arg Glu Thr Ala Gln Asn Thr
145 150 155 160

Gln Thr Gly Asn Gln Gln Glu Pro Ser Pro Asn Leu Ser Arg Glu Lys 165 170 175

Thr Arg Glu Asn Val Pro Asn Ser Asp Ser Gln Pro Pro Pro Ser Cys 180 185 190 Leu Thr Thr Ala Val Pro Ser Pro Ser Lys Pro Arg Thr Ala Gln Leu Val Leu Gln Arg Met Gln Gln Phe Lys Arg Ala Asp Pro Glu Arg Leu 210 215 220 Arg His Ala Ser Glu Glu Cys Ser Leu Glu Ala Ala Arg Glu Glu Asn 230 225 235 240 Val Pro Lys Asp Pro Gln Glu Glu Met Met Ala Gly Asn Val Tyr Gly 250 245 Leu Gly Pro Pro Ala Pro Glu Ser Asp Ala Ala Val Ala Leu Thr Leu 260 270 265 Gln Gln Glu Phe Ala Arg Val Gly Ala Ser Ala His Asp Asp Ser Leu 280 285 Glu Glu Lys Gly Leu Phe Phe Cys Gln Ile Cys Gln Lys Asn Leu Ser 295 300 Ala Met Asn Val Thr Arg Arg Glu Gln His Val Asn Arg Trp Gly Gln 305 310 315 320 Leu Gly Pro Ser Pro Leu Pro Cys Met 325

<210> 3498

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3498

Met Arg Gly Gly Gly Ser Ser Gly Glu Ile Gly Cys Phe Leu Leu Ser

1 5 10 15

Phe Ser Glu Lys Phe Leu Glu Arg Trp Ser Gln Arg Asp Ala Gly Gly
20 25 30

Trp Gly Ala Pro Gly Ser Lys Arg Leu Lys Glu Ser Glu Lys Thr Gln
35 40 45

Ala His Arg Asp Thr Ser Asn Leu Arg Ala Thr Ala Gln Ala Glu Pro
50 55 60

Lys Ala Thr Glu Thr Leu Thr Pro Glu Lys Lys His Arg Asp Arg Gly
65 70 75 80

Ser Arg Ser Ser Leu Cys His Cys Ser Ala Pro Glu Thr Pro Gln His 90 Gly Glu Arg Ala Gly Gly Ser His Glu Lys Pro Arg Ala Leu Thr Gly 100 105 110 Leu Leu Arg Gly Gly Arg Lys Ala Glu Thr Arg Pro Leu Glu Pro Pro 120 Val Arg Thr Gly Pro Val Glu Trp Ala Gln Tyr Val Arg Thr Gln Arg 135 140 Gly Arg Gln Ser Ile Gly Trp Gly Arg Leu Ser Leu Ile Phe Pro Arg 145 150 155 160 Phe Ser Leu Leu Ser Gly Ser Val Val Leu Ser Pro Pro 11e Phe Thr 165 170 175

<210> 3499

Leu Val Ala

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3499

Met Thr Arg Ala Arg lle Gly Cys Phe Gly Pro Gly Gly Arg Ala Arg

1 5 10 15

Gly Thr Glu Ser Ala Pro Glu Pro Ser Lys Arg Val Pro Pro Gly Arg 20 25 30

Ser Trp Gln Thr Gln Glu Val Arg Gln Thr Arg Gly Ala Asn Gly Leu 35 40 45

Gly Pro Arg Ala Gly Ser Ala Gly Ala Lys Ala Pro Gly Pro Ala Gln 50 55 60

Gly Ala Ala Gln His Gly Leu Gly Gly Ser Ala Gly Leu Arg Val Arg
65 70 75 80

Val Ser Pro Leu Ala Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu 85 90 95

Val Leu Cys Leu Val Gly Trp Gly Gly Leu 11e Leu Ala Cys Gly Leu 100 105 110

Pro Met Trp Gln Val Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala Gln Thr Trp Lys Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr Gly His Met Gln Cys Lys Val Tyr Asp Ser Val Leu Ala Leu Ser Thr Glu Val Gln Ala Ala Arg Ala Leu Thr Val Ser Ala Val Leu Leu Ala Phe Val Ala Leu Phe Val Thr Leu Ala Gly Ala Gln Cys Thr Thr Cys Val Ala Pro Gly Pro Ala Lys Ala Arg Val Ala Leu Thr Gly Gly Val Leu Tyr Leu Phe Cys Gly Leu Leu Ala Leu Val Pro Leu Cys Trp Phe Ala Asn lle Val Val Arg Glu Phe Tyr Asp Pro Ser Val Pro Val Ser Gln Lys Tyr Glu Leu Gly Ala Ala Leu Tyr Ile Gly Trp Ala Ala Thr Ala Leu Leu Met Val Gly Gly Cys Leu Leu Cys Cys Gly Ala Trp Val Cys Thr Gly Arg Pro Asp Leu Ser Phe Pro Val Lys Tyr Ser Ala Pro Arg Arg Pro Thr Ala Thr Gly Asp Tyr Asp Lys Lys Asn Tyr Val

<210> 3500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3500

Met Arg Asn Leu Gln Ser Ser lle Gln Asn Trp Arg Arg His Thr Gln

Thr Thr Leu Gln Gly Arg Leu Ala Ala Glu Ala Gly Pro Met Lys Lys

Met Met Lys Lys Thr Met Arg Met Tyr His Val Tyr Tyr Trp Pro Gln 40 Thr Thr Ser Pro Leu Pro Arg Val Ala His Arg Lys Gln Pro Ala Pro 50 55 60 Phe Phe Phe Leu Phe Ser Pro Thr Thr His His Pro Ser Leu Gln Thr 70 75 Leu Pro Pro Thr Arg Leu Gly Cys Arg Val Cys Glu Ala Ala Gln Lys 85 90 Val Cys Lys Ser Pro Leu Cys Leu Ile Cys Val Phe Pro Arg Lys Arg 100 105 110 Ala Gly Ser Leu 115 <210> 3501 <211> 114

<213> Homo sapiens

<212> PRT

<400> 3501 Met Phe His His Gln Gln Ala Tyr Cys Leu Ala Pro Phe Asp Leu Ile Lys Val Arg Leu Gln Asn Gln Thr Glu Pro Arg Ala Gln Pro Gly Ser 20 25 30 Pro Pro Pro Arg Tyr Gln Gly Pro Val His Cys Ala Ala Ser 11e Phe 35 40 45 Arg Glu Glu Gly Pro Arg Gly Leu Phe Arg Gly Ala Trp Ala Leu Thr 55 Leu Arg Asp Thr Pro Thr Val Gly Ile Tyr Phe Ile Thr Tyr Glu Gly 75 70 Leu Cys Arg Gln Tyr Thr Pro Glu Gly Gln Asn Pro Ser Ser Ala Thr 85 90

Val Leu Trp Gln Gly Ala Leu Gln Ala Leu Leu Pro Gly Trp Gln Pro 100 105 110

Arg Pro

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<210> 3502
<211> 148
<212> PRT
<213> Homo sapiens
<400> 3502
Met Ala Gly Thr Leu Asp Leu Asp Lys Gly Cys Thr Val Glu Glu Leu
 1
                  5
                                     10
Leu Arg Gly Cys Ile Glu Ala Phe Asp Asp Ser Gly Lys Val Arg Asp
                                 25
Pro Gln Leu Val Arg Met Phe Leu Met Met His Pro Trp Tyr Ile Pro
                             40
Ser Ser Gln Leu Ala Ala Lys Leu Leu His Ile Tyr Gln Gln Ser Arg
    50
                         55
                                              60
Lys Asp Asn Ser Asn Ser Leu Gln Val Lys Thr Cys His Leu Val Arg
                     70
                                       75
Tyr Trp 11e Ser Ala Phe Pro Ala Glu Phe Asp Leu Asn Pro Glu Leu
                                     90
                                                          95
                 85
Ala Glu Gln Ile Lys Glu Leu Lys Ala Leu Leu Asp Gln Glu Gly Asn
Arg Arg His Ser Ser Leu lle Asp lle Asp Ser Val Cys Val Gly Gly
                                                 125
                            120
Ala Gln Arg Ala Gly Gly Ala Leu Ser lle Leu Tyr His Leu Cys Leu
    130
                                             140
                        135
lle Asn Val Cys
145
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<210> 3503

<211> 599

<212> PRT

<213> Homo sapiens

<400> 3503

Met	Glu	His	Phe	Leu	Leu	Glu	Val	Ala	Ala	Ala	Pro	Leu	Arg	Leu	He
1				5					10					15	
Ala	Ala	Lys	Asn	Glu	Lys	Ser	Arg	Ser	Glu	Leu	Gly	Arg	Phe	Leu	Ala
			20					25				•	30		
Lys	Gln	Val	Trp	Thr	Pro	Gln	Asp	Arg	Gln	Cys	Val	Leu	Ser	Thr	Leu
		35					40					45			
Ala	Gln	Leu	Leu	Leu	Asp	Lys	Asp	Cys	Thr	Val	Leu	Val	Gly	Arg	Gln
	50					55					60				
Leu	Arg	Pro	Leu	Leu	Leu	Asp	Leu	Leu	Glu	Arg	Asn	Ala	Glu	Ala	Ile
65					70					75					80
Lys	Ala	Gly	Gly	Gln	lle	Asn	His	Asp	Leu	His	Glu	Arg	Leu	Cys	Val
				85					90					95	
Ser	Met	Ser	Lys	Leu	lle	Gly	Asn	His	Pro	Asp	Va]	Leu	Pro	Phe	Ala
			100					105					110		
Leu	Arg	Tyr	Phe	Lys	Asp	Thr	Ser	Pro	Val	Phe	Gln	Arg	Leu	Phe	Leu
		115					120					125			
Glu	Ser	Ser	Asp	Ala	Asn	Pro	Val	Arg	Tyr	Gly	Arg	Arg	Arg	Met	Lys
	130					135					140				
Leu	Arg	Asp	Leu	Met	Glu	Ala	Ala	Phe	Lys	Phe	Leu	Gln	Gln	Glu	Gln
145					150					155					160
Ser	Val	Phe	Arg	Glu	Leu	Trp	Asp	Trp	Ser	Val	Cys	Val	Pro	Leu	Leu
				165					170					175	
Arg	Ser	His	Asp	Thr	Leu	Val	Arg	Trp	Tyr	Thr	Ala	Asn	Cys	Leu	Ala
			180					185					190		
Leu	Val	Thr	Cys	Met	Asn	Glu	Glu	His	Lys	Leu	Ser	Phe	Leu	Lys	Lys
		195					200		•			205			
lle	Phe	Asn	Ser	Asp	Glu	Leu	lle	His	Phe	Arg	Leu	Arg	Leu	Leu	Glu
	210					215					220				
Glu	Ala	Gln	Leu	Gln	Asp	Leu	Glu	Lys	Ala	Leu	Val	Leu	Ala	Asn	Pro
225					230					235					240
Glu	Val	Ser	Leu	Trp	Arg	Lys	Gln	Lys	Glu	Leu	Gln	Tyr	Leu	Gln	Gly
				245					250					255	
His	Leu	Val	Ser	Ser	Asp	Leu	Ser	Pro	Arg	Val	Thr	Ala	Val	Cys	G1 y
			260					265					270		
Val	Val	Leu	Pro	Gly	Gln	Leu	Pro	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Asn
		275					280					285			

Arg	Ser	Ser	Ser	Arg	Glu	Gln	Glu	Leu	Ala	Leu	Arg	Ser	Tyr	Val	Leu
	290					295					300				
Val	Glu	Ser	Va]	Cys	Lys	Ser	Leu	Gln	Thr	Leu	Ala	Met	Ala	Val	Ala
305					310					315					320
Ser	Gln	Asn	Ala	Val	Leu	Leu	Glu	Gly	Pro	lle	Gly	Cys	Gly	Lys	Thr
				325					330					335	
Ser	Leu	Val	Glu	Tyr	Leu	Ala	Ala	Val	Thr	Gly	Arg	Thr	Lys	Pro	Pro
			340					345					350		
Gln	Leu	Leu	Lys	Val	Gln	Leu	Gly	Asp	Gln	Thr	Asp	Ser	Lys	Met	Leu
		355					360					365			
Leu	Gly	Met	Tyr	Arg	Cys	Thr	Asp	Val	Pro	G1 y	Glu	Phe	Val	Trp	Gln
	370					375					380				
Pro	Gly	Thr	Leu	Thr	Gln	Ala	Ala	Thr	Met	Gly	His	Trp	lle	Leu	Leu
385					390					395					400
Glu	Asp	lle	Asp	Tyr	Ala	Pro	Leu	Asp	Va]	Val	Ser	Val	Leu	Пе	Pro
				405					410					415	
Leu	Leu	Glu	Asn	Gly	Glu	Leu	Leu	He	Pro	Gly	Arg	Gly	Asp	Cys	Leu
			420					425					430		
Lys	Val	Ala	Pro	Gly	Phe	Gln	Phe	Phe	Ala	Thr	Arg	Arg	Leu	Leu	Ser
		435					440					445			
Cys	G1 y	Gly	Asn	Trp	Tyr	Arg	Pro	Leu	Λsn	Ser	His	Ala	Thr	Leu	Leu
	450					455					460				
Asp	Lys	Tyr	Trp	Thr	Lys	lle	His	Leu	Asp	Asn	Leu	Asp	Lys	Arg	Glu
465					470					475					480
Leu	Asn	Glu	Val	Leu	Gln	Ser	Arg	Tyr	Pro	Ser	Leu	Leu	Ala	Val	Val
				485					490					495	
Asp	llis	Leu		Asp	He	Tyr	lle	Gln	Leu	Thr	Gly	Glu	Lys	His	His
			500					505					510		
Ser	Trp		Asp	Ser	Ser	Val		Cys	Glu	Gln	Ala		Glu	Glu	Val
		515					520					525			
Ser		Ala	Arg	Arg	Glu	Asn	Lys	Arg	Pro	Thr	Leu	Glu	G1 y	Arg	Glu
	530					535					540				
	Ser	Leu	Arg	Tyr	Trp	Thr	Lys	G1n	Phe		Leu	Phe	Phe	Leu	
545					550					555			_		560
Phe	Phe	Phe	Va]		Gln	He	Pro	Ala		Leu	Pro	Arg	Leu		Cys
				565					570					575	

Ser Gly Ala Val Leu Ala His Ser Asn Leu Arg Leu Leu Gly Ser Lys 580 585 590

Phe Leu Pro Ala Arg Ser Lys 595

<210> 3504

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3504

Met Ser Ser Glu Glu Ser Gly Thr Ser Ile Ser Leu Leu Pro Ala Leu

1 5 10 15

Ser Leu Ala Ala Pro Asp Pro Gly Gln Arg Ser Ser Ser Gln Pro Ser 20 25 30

Pro Ala 11e Cys Ser Ala Pro Ala Thr Leu Thr Pro Arg Ser Pro His
35 40 45

Ala Ser Arg Thr Pro Ser Ser Pro Leu Gln Ser Cys Thr Pro Ser Leu
50 55 60

Ser Pro Arg Ser His Val Pro Ser Pro His Gln Ala Leu Val Thr Arg 65 70 75 80

Pro Gln Lys Pro Ser Leu Glu Phe Lys Glu Phe Val Gly Leu Pro Cys 85 90 95

Lys Asn Arg Pro Pro Phe Pro Arg Thr Gly Ala Thr Arg Gly Ala Gl
n 100 105 110

Glu Pro Cys Ser Val Trp Glu Pro Pro Lys Arg His Arg Asp Gly Ser 115 120 125

Ala Phe Gl
n Tyr Glu Tyr Glu Pro Pro Cys Thr Ser Leu Cys Ala Arg
 130 135 140

Val Gln Ala Val Arg

145

<210> 3505

<211> 107

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<212> PRT
<213> Homo sapiens
<400> 3505
Met Ser His Thr Ser His Leu Thr Leu Lys 11e Cys Val 11e His Arg
                                       10
Pro Thr Leu Arg Tyr Leu Thr Leu Ile Ala Tyr Arg Gln His Val Arg
             20
                                  25
Ala Pro Arg Gly Arg Cys Ser His Pro Asp Lys Lys Ser Ala Ala Leu
         35
                                                   45
                              40
Val Leu Arg Ile Leu Phe Pro Arg Thr Glu Ala Leu Pro Ser Thr Ile
                          55
Ser Leu Ala Leu Ala Glu Ser Ser Ser Pro lle Ala Ser Leu Ser Ser
                     70
                                           75
Thr Ser His Ala Ala Leu Arg Pro Gln Gly Asp Gly Gly Arg Gly Val
                 85
                                      90
                                                            95
Glu Thr Arg Met Glu Trp Asn lle Phe Ile Lys
            100
                                 105
<210> 3506
<211> 331
<212\(\mathcal{P}\) PRT
<213> Homo sapiens
<400> 3506
Met Leu Trp Leu Phe Gln Ser Leu Leu Phe Val Phe Cys Phe Gly Pro
                  5
                                      10
Gly Asn Val Val Ser Gln Ser Ser Leu Thr Pro Leu Met Val Asn Gly
             20
                                  25
                                                       30
```

lle Leu Gly Glu Ser Val Thr Leu Pro Leu Glu Phe Pro Ala Gly Glu

Lys Val Asn Phe Ile Thr Trp Leu Phe Asn Glu Thr Ser Leu Ala Phe

lle Val Pro His Glu Thr Lys Ser Pro Glu lle His Val Thr Asn Pro

60

80

75

55

70

50

Lys	Gln	Gly	Lys	Arg	Leu	Asn	Phe	Thr	Gln	Ser	Tyr	Ser	Leu	Gln	Leu
				85					90					95	
Ser	Asn	Leu	Lys	Met	Gl u	Asp	Thr	Gly	Ser	Tyr	Arg	Ala	Gln	11e	Ser
			100					105					110		
Thr	Lys	Thr	Ser	Ala	Lys	Leu	Ser	Ser	Tyr	Thr	Leu	Arg	He	Leu	Arg
		115					120					125			
Gln	Leu	Arg	Λsn	lle	Gln	Val	Thr	Λsn	His	Ser	Gln	Leu	Phe	Gln	Asn
	130					135					140				
Met	Thr	Cys	Glu	Leu	His	Leu	Thr	Cys	Ser	Val	Glu	Asp	Ala	Asp	Asp
145					150					155					160
Asn	Val	Ser	Phe	Arg	Trp	Glu	Ala	Leu	Gly	Asn	Thr	Leu	Ser	Ser	Gln
				165					170					175	
Pro	Asn	Leu	Thr	Val	Ser	Trp	Asp	Pro	Arg	He	Ser	Ser	Glu	Gln	Asp
			180					185					190		
Tyr	Thr	Cys	He	Ala	Glu	Asn	Ala	Val	Ser	Asn	Leu	Ser	Phe	Ser	Val
		195					200					205			
Ser	Ala	Gln	Lys	Leu	Cys	Glu	Asp	Val	Lys	Πe	Gln	Tyr	Thr	Asp	Thr
	210					215					220				
Lys	Met	Ile	Leu	Phe	Met	Val	Ser	Gly	Ile	Cys	Ile	Val	Phe	Gly	Phe
225					230					235					240
He	He	Leu	Leu	Leu	Leu	Val	Leu	Arg	Lys	Arg	Arg	Asp	Ser	Leu	Ser
				245					250					255	
Leu	Ser	Thr	Gln	Arg	Thr	Gln	Gly	Pro	Glu	Ser	Ala	Arg	Asn	Leu	Glu
			260					265					270		
Tyr	Val	Ser	Val	Ser	Pro	Thr	Asn	Asn	Thr	Val	Tyr	Ala	Ser	Val	Thr
		275					280					285			
His	Ser	Asn	Arg	Glu	Thr	Glu	lle	Trp	Thr	Pro	Arg	Glu	Asn	Asp	Thr
	290					295					300				
He	Thr	lle	Tyr	Ser	Thr	He	Asn	His	Ser	Lys	Glu	Ser	Lys	Pro	Thr
305					310					315					320
Phe	Ser	Arg	Ala	Thr	Ala	Leu	Asp	Asn	Va]	Val					
				325					330						

<210> 3507

<211> 160

<212> PRT
<213> Homo sapiens

<400> 3507
Met Pro Ala Ile Ser
I 5
Gln Lys Leu Asn Thr
20
Ile Ser Gly Ser Ser
35
Ser Ser Gly Leu Ser
50
Pro Phe Ser Gln Lys
65

Met Pro Ala IIe Ser Val Ser Pro Ser Leu Gln Lys Tyr Ser Lys Gln

1 5 10 15

Gln Lys Leu Asn Thr Tyr Glu Val Asn Thr Lys Asp Leu His Arg Lys 20 25 30

lle Ser Gly Ser Ser Val Asp Ala Ile Ala His Cys Ser Ala Gly Gln
35 40 45

Ser Ser Gly Leu Ser Phe Asp Phe Gly Pro Val Leu Gln Asn Gln Gln 50 55 60

Pro Phe Ser Gln Lys Thr Val Glu Cys Ser Gln Asp His Leu Trp Lys 65 70 75 80

Val Asn Tyr Ser Ile Phe Asn Leu Leu Pro Trp Ala Met Met Ser Glu 85 90 95

Thr Gln His Gly Gly Arg Thr Ser Ser Cys Val Gly Asn Leu Ser Glu 100 105 110

Pro Pro Trp Arg Pro Pro Lys Trp Leu Trp Gln Ser Cys Arg Gly Gly
115 120 125

Gly Asn Lys Lys Gly Asp Thr Trp Leu Ser Phe Leu Asn Gln Leu Thr 130 135 140

Met Gly Thr His Leu Tyr Trp Asn Phe Arg Val Arg Lys Tyr Gln Asn 145 150 155 160

<210> 3508

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3508

Met Lys Ser Cys Ser Leu Ala Gly Ala Gly Val Gln Trp His Asp Phe

1 5 10 15

Gly Ser Leu Gln Pro Pro Pro Pro Ser Phe Arg Arg Phe Ser Cys Leu

20 25 30

Thr Leu Pro Arg Ala Gly Ile Thr Gly Val His His His Ser Trp Leu lle Phe Val Phe Leu Val Gln Met Arg Phe His His Val Gly Gln Ala 50 55 60 Gly Phe Glu Leu Met Thr Leu Ser Gly Leu Pro Ala Leu Ala Ser Gln 70 75 Asn Ala Gly Ile Thr Gly Met Ser Tyr Tyr Ala Trp Pro Gly Leu Ile 85 90 Leu Glu lle Asp Arg Leu Cys Val Ala Leu Ala Thr Val Gln Trp Leu 100 105 110 Phe Thr Ala Val Ile Met Ala His Arg Ser Pro Lys Leu Lys Val Gly 120 125 Ser Ser Cys Leu Pro Ile Ser Ala Phe Leu Val Ala Arg Thr Thr Gly 135 140 Thr Leu His His Thr Gln Leu Val Leu Gly Val Leu Ser Lys Leu Asp 145 150 155 160 Thr Trp

<210> 3509

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3509

Met Ala Lys Glu lle Lys Ser Asn Arg Gln Glu Arg Gly Ala Thr Gly

1 5 10 15

Leu Val Asn Ser Gln Thr Glu Leu Val 11e Gly Gln Trp Lys Val Asp 20 25 30

Cys Ser Thr Phe Pro Phe Leu Lys Val Val Cys Tyr Lys Glu Pro Pro
35 40 45

Leu His Val Arg Ala Ala Leu Asp Ser Leu Ser Phe Ile His Met Ser 50 55 60

Glu Gly Leu Cys Ser Arg Ala Met Arg Glu Glu Phe Ala Thr Leu Arg 65 70 75 80

```
Ala Val Ser Trp Asn Pro Gly Ala Pro Phe His Val Ser Leu Gly Ala
Glu Arg Val Thr His Val Trp Glu Trp Tyr Val Trp Gln Ser Met Trp
            100
                                 105
                                                     110
Ala Phe Gly Phe Leu His Trp Cys Ala His Ile Leu Cys Pro Met Ile
        115
                            120
                                                 125
Phe Asn Leu Asp Lys Glu Ile Asp Ile Cys Phe Pro His Leu Gly Asp
                        135
                                             140
Lys
145
<210> 3510
<211> 606
<212> PRT
<213> Homo sapiens
<400> 3510
Met Phe Gly Asn Glu Cys Cys Phe Ser Thr Gly Glu Val Ile Lys Ile
                  5
 1
                                      10
                                                          15
Thr Gly Leu Lys Val Lys Lys 11e 11e Ala Glu Ile Cys Glu Gln 11e
             20
                                 25
                                                      30
Glu Gly Cys Glu Phe Leu Gln Pro Phe Glu Leu Pro Met Asn Phe Pro
                             40
                                                  45
Gly Leu Phe Lys Ile Val Ala Asp Lys Thr Pro Tyr Leu Thr Met Glu
     50
                         55
Glu lle Thr Arg Thr lle His lle Gly Pro Ser Arg Leu Gly His Pro
                     70
                                          75
Cys Phe Tyr His Gln Lys Asp lle Lys Leu Glu Asn Leu Ile lle Lys
                 85
                                      90
                                                          95
Gln Gly Glu Gln lle Met Leu Asn Ser Val Glu Glu lle Asp Gly Glu
                                 105
lle Met Val Ser Cys Ala Val Ala Arg Asn His Gln Thr His Ser Phe
                            120
                                                 125
```

Asn Leu Pro Leu Ser Gln Glu Gly Glu Phe Tyr Glu Cys Glu Asp Glu

Arg	He	Tyr	Thr	Leu	Lys	Glu	He	Val	Glu	Trp	Lys	He	Pro	Lys	Asn
145					150					155					160
Arg	Thr	Arg	Thr	Val	Asn	Leu	Thr	Asp	Phe	Ser	Asn	Lys	Trp	Asp	Ser
				165			:		170					175	
Thr	Asn	Pro	Phe	Pro	Lys	Asp	Phe	Cys	Gly	Thr	Leu	lle	Leu	Lys	Pro
			180					185					190		
Val	Tyr	Glu	He	Gln	Gly	Val		Lys	Phe	Arg	Lys		Пе	He	Arg
		195					200					205			
Ile	Leu	Pro	Ser	Leu	Asp	Val	Glu	Val	Lys	Asp		Thr	Asp	Ser	Tyr
	210					215					220				
Asp	Ala	Asn	Trp	Phe	Leu	Gln	Leu	Leu	Ser		Glu	Asp	Leu	Phe	
225					230					235					240
Met	Thr	Ser	Lys	Glu	Phe	Pro	Пе	Val	Thr	Glu	Val	Пe	Glu	Ala	Pro
				245					250					255	
Glu	Gly	Asn		Leu	Pro	Gln	Ser		Leu	Gln	Pro	Gly		Thr	He
			260					265					270		
Val	He		Lys	Lys	Tyr	Gln		Ser	Arg	11e	Leu		Ser	Glu	He
		275					280					285			
Arg		Asn	Phe	Pro	Lys	Arg	His	Phe	Leu	lle		Thr	Ser	Tyr	Lys
	290					295					300		_		_
	Lys	Phe	Lys	Arg		Pro	Arg	Glu	Phe			Ala	Tyr	Asp	
305					310			_		315					320
Glu	lle	Ala	Lys		Glu	Lys	Glu	Pro		His	Val	Val	Ala		Lys
				325				_	330			_		335	
Ala	Phe	His		Pro	His	Asp	Lys		Ser	Ser	Val	Ser		Gly	Asp
			340		0.3	~	0.1	345	(C)	0.1			350	6.1	0.1
GIn	Phe		Val	His	GIn	Ser		Ihr	lhr	GJu	Val		Cys	Glu	Gly
~ ~		355					360			6.1		365	,	,	
He		Lys	Val	Val	Asn	Val	Leu	Ala	Cys	GIu		He	Leu	l.ys	Lys
	370					375			_		380		0.1		
	Tyr	Glu	Ala	Ala		Leu	Pro	Leu	Tyr		Glu	Gly	Gly	Phe	
385					390		0.7			395	6	0.1		6	400
Glu	Val	He	His		Lys	Lys	GIn	Tyr		Пе	Ser	Glu	Leu		Lys
				405					410					415	
GIn	Phe	Arg		Pro	Phe	Asn	Val		Val	Ser	Val	Arg		Leu	Ser
			420					425					430		

lle Glu Glu Asp Val Leu Ala Ala Thr Pro Gly Leu Gln Leu Lys Glu Asp 11e Thr Asp Ser Tyr Leu Leu 11e Ser Asp Phe Ala Asn Pro Thr Glu Cys Trp Glu lle Pro Val Gly Arg Leu Asn Met Thr Val Gln Leu Val Ser Asn Phe Ser Arg Asp Ala Glu Pro Phe Leu Val Arg Thr Leu Val Glu Glu Ile Thr Glu Glu Gln Tyr Tyr Met Met Arg Arg Tyr Glu Ser Ser Ala Ser His Pro Pro Pro Arg Pro Pro Lys His Pro Ser Val Glu Glu Thr Lys Leu Thr Leu Leu Thr Leu Ala Glu Glu Arg Thr Val Asp Leu Pro Lys Ser Pro Lys Arg His His Val Asp Ile Thr Lys Lys Leu His Pro Asn Gln Ala Gly Leu Asp Ser Lys Val Leu Ile Gly Ser Gln Asn Asp Leu Val Asp Glu Glu Lys Glu Arg Ser Asn Arg Gly Ala Thr Ala Val Ala Glu Thr Phe Lys Asn Glu Lys His Gln Lys

<210> 3511

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3511

 Met Glu Met Glu Met Glu Arg Gln Leu Phe Leu Thr Thr Gln Pro Ser Pro

 1
 5
 10
 15

 Leu Pro Gly Gly Thr Pro Arg Asn Glu Ala Leu Pro Leu Arg Glu Phe
 20
 25
 30

 Pro Ala Thr Pro Ser Leu Gly Pro Gly Met Ala Ala Val Arg Ala Pro
 35
 40
 45

<210> 3512

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3512

Met Glu Ala Gly Cys Lys Leu Lys Leu Lys Pro Pro Leu Tyr Phe Ser

1 5 10 15

Ser Thr 11e Gly Phe Glu Ser Pro Asp Gly Ser Ser Tyr Pro His Phe 20 25 30

Lys Pro Cys Leu Leu Thr 11e Ser Ser Cys Ser Leu Thr 61n Ser Pro 35 40 45

Ala Met Ala Ser Ser Leu Ser Ser Thr Val Lys Gly Arg Leu Phe Thr 50 55 60

Gln Ala His Lys Thr Leu Asp Tyr His Ser Pro Val IIe Leu Leu Ser 65 70 75 80

Tyr Cys Ser Leu Leu Tyr Leu Ser Pro Leu Lys Pro Pro Trp Pro Pro
85 90 95

Pro Ile Leu Val Ser Leu His

100

<210> 3513

<211> 244

<212> PRT

<213> Homo sapiens

<400)> 35	513													
Met	Ser	His	Arg	Ala	Trp	Pro	Thr	Ser	Λla	Leu	Leu	Asn	Leu	Ser	Ser
1				5					10					15	
Leu	Ser	Leu	Thr	Leu	Pro	Gln	Trp	Leu	Leu	Tyr	Gln	Pro	Thr	Lys	Lys
			20					25					30		
Ala	Pro	Leu	Pro	Thr	Leu	Λla	Gly	Gln	Arg	Ala	His	Ser	Leu	Pro	Ser
		35					40					45			
His	Lys	Pro	Val	Pro	His	Ala	Trp	Ala	Leu	Leu	Arg	Pro	Lys	Gln	Pro
	50					55					60				
Ser	Ser	Asn	Ser	Glu	Glu	Asn	Pro	Glu	Leu	Leu	Leu	Leu	Thr	Val	Val
65					70					75					80
He	His	Pro	Leu	Asn	Ala	Tyr	Cys	Gly	Ser	Pro	Glu	Thr	He	Thr	Trp
				85					90					95	
Leu	Ala	Ser	Val	Asn	Ser	His	Asn	Ser	Phe	Gln	Cys	Tyr	His	Ser	Cys
			100					105					110		
Val	Cys	Pro	Leu	Leu	Pro	Trp	Leu	Ser	Pro	Arg	Tyr	Phe	Leu	Gln	Asp
		115					120					125			
Ser	Val	Pro	Ser	Leu	Val	Ser	Gly	Phe	Ser	Arg	Tyr	Leu	Pro	Met	Αlε
	130					135					140				
Cys	Leu	Gly	Pro	Ala	Ser	Gly	Asn	Pro	Ala	Trp	He	Val	Ala	Arg	Lys
145					150					155					160
Gly	Cys	Glu	Asp	Trp	Met	Pro	Pro	Phe	Val	Phe	Val	Phe	Ser	Phe	Πe
				165					170					175	
Pro	Ser	Phe	Leu	Ser	Ser	Leu	Pro	Ser	Phe	Leu	Pro	Leu	Ser	Leu	Sei
			180					185					190		
Leu	Ser	Phe	Phe	Leu	Ser	Leu	Phe	Leu	Phe	Leu	Cys	Leu	Phe	Phe	Phe
		195					200					205			
Leu	Phe	Phe	Arg	Thr	Cys	His	Pro	Gly	Trp	Ser	Ala	Val	Ala	Gln	Sei
	210					215					220				
Trp	Leu	Thr	Thr	He	Ser	Ala	Ser	Gln	He	Gln	Ala	lle	Leu	Arg	Pro
225					230					235					240
Gln	Pro	Pro	Lys												

<211> 108 <212> PRT <213> Homo sapiens <400> 3514 Met Arg Val Pro Val Leu Tyr Pro Phe Gln His Leu Val Leu Ser Val 10 Lys Lys Ile Ile Leu Val Ser Met Gln Trp Tyr Leu Ile Lys Asp Thr 20 25 Gln Met Ala Asn Lys Gln Met Lys Arg Cys Ser Ile Ser Leu Ala Thr 40 45 Gly Glu Met Gln lle Lys Thr Thr Val Arg Tyr His Phe Thr Pro Thr 50 55 60 Arg Phe Thr Ile Ile Lys Arg Trp Lys Ile Thr Ser Val Asp Lys Asn 75 Leu Glu Lys Met Glu Pro Ser Tyr Thr Ile Gly Gly Asn Val Gly Trp 85 90 Cys Ser Cys Ser Glu Lys Gln Phe Leu Thr Leu Gly 100 105 <210> 3515 <211> 110 <212> PRT <213> Homo sapiens <400> 3515 Met Glu Ala Arg Pro Pro Pro Glu Arg Gly Ser Leu Lys Ile lle Leu 1 5 10 Thr Ser Leu Ser Ser Val Leu Thr Ser Leu Asp Cys 11e Leu Ser Phe 25 His Leu Arg Ser Ser Trp Phe Trp Leu Ala Ser Ser Asp Ile Thr Pro 35 40 45 Ala Glu Glu Arg Glu Gly Thr Arg Cys Ile Thr Ala Trp Ser Gln Gly

<210> 3514

<210> 3516

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3516

Met Leu Leu Glu Gly Arg Asp Gly Thr Ser lle His Leu Val Asn Asn 1 5 10 15

Cys Gly Leu Ser Ser Val Ser Met Pro Ala Thr Val Leu Ser Ser Asp 20 25 30

His Thr Ala Val Asn Arg lle Asp Glu Leu Ser Leu Ser Ser Trp Ser 35 40 45

Ser Gln Pro Ser Gly Glu Asp Arg Tyr 11e Gly Asn Lys Phe Leu 11e 50 55 60

Ala Ser Lys Gly Ala Ser Pro Lys Lys His Gln Val Thr Gly Tyr Arg
65 70 75 80

Thr Met Trp Asp Gly Pro Gly Arg Val Cys Glu Phe Pro Val Ala Ala

85 90 95

Val Thr Asn Tyr His Lys Phe Ser Gly Leu Lys Leu lle Lys Met Gly
100 105 110

Arg Val Gln Trp Leu Met Pro Val Ile Pro Ala Leu 115 120

<210> 3517

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3517

Met Pro Phe Ala Trp Pro Ala Pro Glu Trp Pro Gln Cys Gly Arg Ala

1 5 10 15

Ala Glu Ala Pro Arg His Gln Cys Asp Pro Val Ser Thr Ala Cys Ser 20 25 30

Leu Trp Thr Pro Phe Ser Ser His Gly Pro Pro Arg His Ser Ala Pro
35 40 45

Gly Pro Ser Ala Phe Pro Gln Leu Ala Leu Trp Lys Cys Gly Gln Gln 50 55 60

Cys Phe Gln Ser Pro Ser Ala Trp Val Cys Pro Val Phe Pro Cys Val 65 70 75 80

Asp Glu Gly Pro Ala Leu Leu Ala Gly Ala Ala Leu Asp Thr Pro Phe 85 90 95

Pro Arg His Ser Pro Gly Leu Ala His Met Gln Leu Arg Ser Arg Gly
100 105 110

Met.Leu Thr Gln Arg Leu Val Gly Ala Ala Ser Thr Asp Phe Ser Leu 115 120 125

Glu Ser Ser Cys Leu Leu Phe Ile Val Ser Arg Cys Leu Arg Glu Ile 130 135 140

Pro

145

<210> 3518

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3518

Met Phe Lys Lys Asn Gly Ser Phe Arg Asn Asp Lys Leu Phe His Pro

1 5 10 15

lle Thr Pro Asn Thr Cys Gly Ser Asp Ser Ser Leu His Leu Tyr lle
20 25 30

Leu Tyr Leu His Trp Pro Asp His Pro Arg Thr Thr Tyr Leu Thr Ser

40 35 45 Ala Pro Phe Cys Leu Leu Thr Gln His Ser Leu Ser Leu Ser Phe Ser 55 60 Leu Pro Leu Pro Leu Phe Leu Pro Arg Pro Ser Val Thr His Thr His 70 75 80 65 Thr His Thr His Arg Leu His Asn Ala His Arg Asn Val Leu 90 85 Ile Pro Phe Val 100 <210> 3519 <211> 103 <212> PRT <213> Homo sapiens <400> 3519 Met Gly Gly Arg Ser His Pro Gln Pro Ala Gly Thr Arg Trp Arg Leu 10 Lys Ser Leu Ser Thr Leu Thr Leu Val His Leu Thr Gly Thr Leu Thr 20 25 30 Ser 11e Ser Lys Thr Trp Ser Leu Arg Thr Pro Cys Leu Gln Arg Leu 45 40 Leu Ile Ser Ser Arg Val Leu Gly Ile Gln Gly Arg Gly Gln Pro Gly 50 55 60 Trp Thr Gly Ser Trp Glu Gly Val Ser Trp Gln Pro Pro Gly Gln Thr 75 Asp Leu Pro Ala Cys Gln Arg Gln Pro Val Leu Pro Ala Pro Thr Arg 85 90 95 Thr Ser Ser Gln Ala Arg Cys 100

<210> 3520 <211> 105

<212> PRT

<213> Homo sapiens

<400> 3520

Met Arg 11e Leu Val I1e Pro His Leu Gln Gln His Leu Gly Tyr Phe 1 5 10 15

Thr Trp Phe IIe Ile Cys Ile Ser Leu Met Thr Asn Glu Arg His Phe
20 25 30

Val Ile Tyr Val Phe Asp Val Tyr Leu Ser Ser Ile Val Lys Cys Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Phe Lys Ser Phe Asp His Ile Leu Ile Gly Gln Leu Phe Phe Leu Leu 50 55 60

Leu Asn Tyr Ser Pro Leu Ser IIe Leu Asn Thr IIe Pro Ser Ser Asp
65 70 75 80

Met Arg Ser Val Asn Ile Phe Ser Gln Ala Ala Ala Cys Leu Phe Ile 85 90 95

Phe Leu Leu Val Tyr Phe Val Lys Phe 100 105

<210> 3521

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3521

Met Ser Gly Ser Ser Arg Met Gly Thr Thr Thr Ser Arg Ser Gly Ser

1 5 10 15

Glu Pro Pro Ala Val Arg Pro Ala Lys Ala Arg Val Arg Met Pro Ser 20 25 30

Arg Ser Met Ala Pro Gly Ser Ala Pro Pro Arg Cys Gly Lys Gly Leu 35 40 45

Gly Arg Ala Leu Arg Pro Leu Pro Arg Ser Pro Cys Ser Pro His Ser 50 55 60

Gly Thr Ala Asn Ala Thr Gly Gln Pro Ala Val Pro Arg Lys Glu Ser 65 70 75 80

Gln Gly Arg Glu Thr Pro Pro Arg Ala Ala Ser Val His Pro Ala Ala

 Arg Ala Ser Tyr Leu Cys Leu Ser Lys Gln Ser Ala Pro Trp Glu Leu

 100
 105

 110
 110

 Lys Tyr Asn Arg Cys Gln Val Gln Gly Arg Arg Phe Ala Ala Glu Asn
 115

 120
 125

<210> 3522

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3522

Met Tyr Gln Gly Lys Glu Gly Arg Lys Arg Arg Ser Arg Ser Arg Asp 1 5 10 15

Ser Gly Glu Leu Gly Leu Ser Pro Ala Ala Val Leu Arg Val Ser Leu 20 25 30

Asn Cys Pro Trp Ala Ala Ser Leu Glu Val Leu Lys Gly Ser Leu Glu 35 40 45

Gly Asn Lys Trp Pro Leu Cys Val Glu Ala Leu Val Arg Val Tyr Lys 50 55 60

Ser Lys Thr Gln Leu Gly Ala Val Ala His Ala Cys Asn Pro Ser Arg
65 70 75 80

Gly Arg Gln 11e Thr Trp Gly Gln Glu Phe Glu Thr Ser Leu Ala Asn 85 90 95

Val Val Lys Pro Arg Leu Tyr 100

<210> 3523

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3523

Met Ala Trp lle Pro Leu Phe Leu Gly Leu Leu Ala Tyr Cys Thr Gly

5 10 15 Ser Val Ala Ser Tyr Asp Leu Ile Gln Thr Pro Ser Leu Ser Val Ser 20 25 Pro Gly Leu Thr Ala Thr 11e Thr Cys Ser Gly Asp Arg Leu Gly Ser 35 40 45 Arg Phe Val Ser Trp Tyr Gln Gln Arg Ser Gly Gln Ser Pro Val Val 55 Val Leu Phe Gln Asp Asn Lys Arg Pro Ser Gly 11e Pro Glu Arg Phe 70 75 Ser Gly Ser Asn Ser Gly Asp Thr Ala Thr Leu Asn 11e Thr Gly Ala 90 85 Gln Thr Leu Asp Glu Ala His Tyr Tyr Cys Gln Val Trp Asp Ala Asp 100 105 110 Thr Gly Val 11e Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Glu 120 125 115 Thr Leu Cys Val 11e Ser Phe Phe Val Cys Pro Leu Ser Asn Glu Asp 135 Gln Ser Phe Ser Leu His Ser Arg Pro Asp Arg Gly Pro Leu Ser Ser 150 155 Leu Leu Arg Pro Ser Ile Gly Ser Pro Arg Arg His Thr His Ser Met 165 170 175 Thr Asp Thr Arg Val Arg Gly Gln Asp Gly Val Ala Tyr 180 185

<210> 3524

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3524

Met Gly Asp Leu Thr Cys Arg Thr Trp Thr Cys Gln His Arg Ser Leu

1 5 10 15

Leu Thr Leu Pro Val Cys Gly Phe Leu Pro Ser Cys Ala Pro Trp Leu

20 25 30

Arg Arg Pro Gly Asn Ser Ser Leu Gly Ile Pro Ala Glu Gln Leu Leu

35 40 45 Gly Leu Gly Tyr Thr Ser Gln Trp Glu Gly Leu Ala Trp Gly Leu Arg 55 60 Ala Arg Gly Gly Val Val Gly Gly Val Cys Leu Thr Ser Lys Asn Leu 70 80 Leu Gln Ile Arg Glu Asn Met Lys Glu Leu Asp Phe Gly Phe Pro Gly 90 Leu Pro Asp Leu Val Ala Leu Gly Ser Gly Asp Ile Trp Arg Leu Ile 100 105 Leu Cys Ser Arg Asp Lys Asn Pro Leu His Ala His Ser Leu Phe Pro 115 120 Leu Asn Arg Glu Lys Leu Gly Leu Glu Asp Thr Ala Pro Thr Ser 130 135140

<210> 3525

<211> 313

<212> PRT

<213> Homo sapiens

<400> 3525

Met Gly Ala Glu Ala Ser Ser Ser Trp Cys Pro Gly Thr Ala Leu Pro
1 5 10 15

Glu Glu Arg Leu Ser Val Lys Arg Ala Ser Glu lle Ser Gly Phe Leu 20 25 30

Gly Gln Gly Ser Ser Gly Glu Ala Ala Leu Asp Val Leu Thr His Val
35 40 45

Leu Glu Gly Ala Gly Asn Lys Leu Thr Ser Ser Cys Gly Lys Pro Ser
50 55 60

Ser Asn Arg Met Ser Leu Gln Trp Thr Ala Val Ala Thr Phe Leu Tyr 65 70 75 80

Ala Glu Val Phe Val Val Leu Leu Cys Ile Pro Phe Ile Ser Pro 85 90 95

Lys Arg Trp Gln Lys 11e Phe Lys Ser Arg Leu Val Glu Leu Leu Val
100 105 110

Ser Tyr Gly Asn Thr Phe Phe Val Val Leu Ile Val Ile Leu Val Leu

		115					120					125			
Leu	va]	lle	Asp	Ala	Val	Arg	Glu	lle	Arg	Lys	Tyr	Лsp	Asp	Val	Thr
	130					135					140				
Glu	Lys	Val	Asn	Leu	Gln	Asn	Asn	Pro	Gly	Ala	Met	Glu	His	Phe	His
145					150					155					160
Met	Lys	Leu	Phe	Arg	Ala	Gln	Arg	Asn	Leu	Tyr	Пе	Ala	Gly	Phe	Ser
				165					170					175	
Leu	Leu	Leu	Ser	Phe	Leu	Leu	Arg	Arg	Leu	Val	Thr	Leu	Ile	Ser	Gln
			180					185					190		
Gln	Ala	Thr	Leu	Leu	Ala	Ser	Asn	Glu	Ala	Phe	Lys	Lys	Gln	Ala	Glu
		195					200					205			
Ser	Ala	Ser	Glu	Ala	Ala	Lys	Lys	Tyr	Met	Glu	Glu	Asn	Asp	Gln	Leu
	210					215					220				
Lys	Lys	Gly	Ala	Ala	Val	Asp	Gly	Gly	Lys	Leu	Asp	Val	Gly	Asn	Ala
225					230					235					240
Glu	Val	Lys	Leu	Glu	Glu	Glu	Asn	Arg	Ser	Leu	Lys	Ala	Asp	Leu	Gln
				245					250					255	
Lys	Leu	Lys	Asp	Glu	Leu	Ala	Ser	Thr	Lys	Gln	Lys	Leu	Glu	Lys	Ala
			260					265					270		
Glu	Asn	Gln	Val	Leu	Ala	Met	Arg	Lys	G1n	Ser	Glu	Gly	Leu	Thr	Lys
		275					280					285			
Glu	Tyr	Asp	Arg	Leu	Leu	Glu	Glu	His	Ala	Lys	Leu	Gln	Ala	Ala	Val
	290					295					300				
	G1y	Pro	Met	Asp	Lys	Lys	Glu	Glu							
305					310										

<210> 3526

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3526

Met Glu Pro Ala Leu Arg Trp Arg Thr Gln Thr Leu Ser Leu Lys Gly

1 5 10 15

Arg Arg Arg Thr Gly Asn Ser Trp Ala His Pro Arg Asp Lys Arg His

	20					25					30		
Arg Leu Asn	He	Ser	Pro	Pro	Pro	Ser	Pro	Thr	Asn	Leu	Pro	Arg	Arg
35					40					45			
Pro Ala Pro	Thr	Pro	Pro	Pro	Arg	Pro	Лsp	Pro	Pro	Leu	Ala	Val	Gly
50				55					60				
Val Thr Gln	Gly	Gln	Arg	Leu	Arg	Va]	Pro	Gly	Asp	Lys	Val	Gly	His
65			70					75					80
Ser Ser Ser	Leu	His	Pro	Gly	Pro	Arg	Asn	Thr	His	Gln	Arg	Thr	Ala
		85					90					95	
Val Arg Gly	Arg	Thr	Arg	Ala	Cys	Val	Cys	Val	Cys	Val	Cys	Val	Arg
	100					105					110		
Ala Arg Ala	Arg	Ala	His	Thr	Gly	Gln	G1 y	Ser	Leu	11e	Arg	Asn	Ala
115					120					125			
Gly Gly Thr	Ser	Ser	Val	Ser	Asp	Phe	Arg	Phe	Phe	His	He	Ser	Glu
130				135					140				
Cys Leu His	Tyr	lle	Val	Ser									
145			150										
<210> 3527													
<211> 361													
<212> PRT													
<213> Homo :	sapio	ens											
<400> 3527													

Met Cys Val Trp Arg Leu Ile Leu Asp Ala Val Asp Gly Arg Glu Cys

His His Leu Val His Cys Tyr Met Pro Gln Glu lle Ile Ala Gln Pro

Phe Leu Asn Phe Lys Val Phe Leu Phe Asn Arg Phe Cys Thr Asp Cys

Lys Asn Lys Val Leu Arg Ala Tyr Asn lle Leu lle Gly Glu Leu Asp

Cys Ser Lys Glu Lys Gly Tyr Cys Ala Ala Leu Tyr Glu Gly Leu Arg

Cys Cys Pro His Glu Arg His 11e His Val Cys Cys Glu Thr Asp Phe

				85					90					95	
lle	Ala	His	Leu	Leu	Gly	Arg	Ala	Glu	Pro	Glu	Phe	Ala	Gly	Gly	Arg
			100					105					110		
Arg	Glu	Arg	His	Ala	Lys	Thr	11e	Asp	lle	Ala	Gln	Glu	Glu	Val	Leu
		115					120					125			
Thr	Cys	Leu	Gly	He	His	Leu	Tyr	Glu	Arg	Leu	His	Arg	lle	Trp	Gln
	130					135					140				
Lys	Leu	Arg	Ala	Glu	Glu	Gln	Thr	Trp	Gln	Met	Leu	Phe	Tyr	Leu	Gly
145					150					155					160
Val	Asp	Ala	Leu	Arg	Lys	Ser	Phe	Glu	Met	Thr	Val	Glu	Lys	Val	Gln
				165					170					175	
Gly	lle	Ser	Arg	Leu	Glu	Gln	Leu	Cys	Glu	Glu	Phe	Ser	G] u	Glu	Glu
			180					185					190		
Arg	Val	Arg	Glu	Leu	Lys	Gln	Glu	Lys	Lys	Arg	Gln	Lys	Arg	Lys	Asn
		195					200					205			
Arg	Arg	Lys	Asn	Lys	Cys	Val	Cys	Asp	Ile	Pro	Thr	Pro	Leu	Gln	Thr
	210					215					220				
Ala	Asp	Glu	Lys	Glu	Val	Ser	Gln	Glu	Lys	Glu	Thr	Asp	Phe	He	Glu
225					230					235					240
Asn	Ser	Ser	Cys	Lys	Ala	Cys	Gly	Ser	Thr	Glu	Asp	Gly	Asn	Thr	Cys
				245					250					255	
Val	Glu	Val	Пе	Val	Thr	Asn	Glu	Asn	Thr	Ser	Cys	Thr	Cys	Pro	Ser
			260					265					270		
Ser	G1y	Asn	Leu	Leu	Gly	Ser	Pro	Lys	11e	Lys	Lys	Gly	Leu	Ser	Pro
		275					280					285			
His	Cys	Asn	G1 y	Ser	Asp	Cys	G1 y	Tyr	Ser	Ser	Ser	Met	Glu	Gly	Ser
	290					295					300				
Glu	Thr	Gly	Ser	Arg	Glu	Gly	Ser	Asp	Val	Ala	Cys	Thr	Glu	Gly	lle
305					310					315					320
Cys	Asn	His	Asp	G1u	His	Gly	Asp	Asp	Ser	Cys	Va]	His	His	Cys	Glu
				325					330					335	
Asp	Lys	G]u	Asp	Asp	Gly	Asp	Ser	Cys	Val	Glu	Cys	Trp	Ala	Asn	Ser
			340					345					350		
Glu	Glu		Asp	Thr	Lys	G1 y	Lys	Asn							
		355					360								

<211> 130 <212> PRT <213> Homo sapiens <400> 3528 Met Arg Pro Gln Ser Phe Arg Ser Arg Pro Trp Gly Val Arg Ala Pro 1 5 10 15 Pro Gly Asn Thr Val Arg Pro Gln Arg Leu Gln Pro Lys Leu Ala Arg 25 Ser Met Gly Gln Val Pro Leu Cys Leu Glu Lys Pro Gly Ala Leu Leu 40 45 Pro Cys Pro Pro Glu Pro Thr Ala Gly Arg Thr Pro Pro Ala Pro Pro 50 55 60 His Pro Val Ala Arg Asp Pro Ser Glu Asn Ser Glu Ala Gly Pro Arg 70 75 Ala Val Pro Ala Gly Ala Arg Pro Val Gly Arg Thr Gln Pro Arg Asn 85 90 Gln Leu Pro Glu Thr Arg Val Pro Leu Gly Cys Pro Pro Ala Trp Arg 105 Arg Pro Gln Ala Arg Ser His Pro Phe Pro Glu Leu Gln Asp Arg Ala 125 120 Ser Ser 130 <210> 3529 <211> 327 <212> PRT <213> Homo sapiens <400> 3529

Met Gly lle Cys Phe Glu Glu Lys Ser Cys Lys Cys Phe Cys Leu lle

10

15

5

<210> 3528

Phe	He	Ala	Leu	G1 y	Met	Val	Pro	Pro	Pro	Glu	Asn	Val	Arg	Met	Asn
			20				•	25					30		
Ser	Val	Asn	Phe	Lys	Asn	Пе	Leu	Gln	Trp	Glu	Ser	Pro	Ala	Phe	Ala
		35					40					45			
Glu	Gly	Asn	Leu	Thr	Phe	Thr	Лlа	Gln	Tyr	Leu	Ser	Tyr	Arg	He	Phe
	50					55					60				
Gln	Asp	Lys	Cys	Met	Asn	Thr	Thr	Leu	Thir	Glu	Cys	Asp	Phe	Ser	Ser
65					70					75					80
Leu	Ser	Lys	Tyr	Gly	Asp	His	Thr	Leu	Arg	Val	Arg	Ala	Glu	Phe	Ala
				85					90					95	
Asp	Glu	His	Ser	Asp	Trp	Val	Asn	lle	Thr	Phe	Cys	Pro	Val	Asp	Asp
			100					105					110		
Thr	He	lle	Gly	Pro	Pro	Gly	Met	Gln	Val	Glu	Val	Leu	Ala	Asp	Ser
		115					120					125			
Leu	His	Met	Arg	Phe	Leu	Ala	Pro	Lys	He	Glu	Asn	Glu	Tyr	Glu	Thr
	130					135					140				
	Thr	Met	Lys	Asn	Val	Tyr	Asn	Ser	Trp		Tyr	Asn	Val	Gln	
145					150					155					160
Trp	Lys	Asn	Gly		Asp	Glu	Lys	Phe		He	Thr	Pro	Gln		Asp
			_	165					170	mı	m.			175	
Phe	Glu	Val		Arg	Asn	Leu	Glu		Trp	Thr	Thr	Tyr		Val	GIn
		21	180					185			61	6.1	190	6	0.7
Val	Arg		Phe	Leu	Pro	Asp		Asn	Lys	Ala	61 y		Irp	Ser	GTu
ь	V 1	195	C1	C)	T)	TI	200		C1	TI.	V 1	205 D	C	T.	11 .
170		Cys	GIU	GIN	Thr		HIS	Asp	GIU	inr		Pro	ser	irp	Mer
Vol.	210	Vol.	11.	Lau	Mat	215	San	Vo.1	Dho	Mot	220 Vol.	Cuc	Lou	Ala	Lau
225	Ala	val	116	Leu	Met 230	мта	Sei	val	гие	235	vai	Cys	Leu	ма	240
	Cly	Cvc	Pho	Δ1a	Leu	Lou	Trn	Cvc	Val		Lve	lve	Thr	lve	
Leu	Oly	Cys	THE	245	Leu	i.eu	пр	Cys	250	1 y 1	Lys	rys	1111	255	1 7 1
Ala	Phe	Ser	Pro		Asn	Ser	Len	Pro		His	Leu	lve	Glu		Len
mu	1110	561	260	,,,, 6	71,511	001	Lea	265	0111		1.00	12,50	270	1110	150 0
Glv	Hic	Pro		Hic	Asn	Thr	Len		Phe	Phe	Ser	Phe		Leu	Ser
0.17		275			715211		280	,,,,,			., .,	285		200	
Asp	Glu		Asp	Val	Phe	Asp		Leu	Ser	Val	He		Glu	Asp	Ser
	290					295					300			- 1-	

Glu Ser Gly Lys Gln Asn Pro Gly Asp Ser Cys Ser Leu Gly Thr Pro 305 310 315 320

Pro Gly Gln Gly Pro Gln Ser 325

<210> 3530

<211> 182

<212> PRT

<213> Homo sapiens

<400> 3530

Met Leu Glu Lys Gly Ala Leu Asp Leu Ala Thr Ser Gly Leu Cys Thr
1 5 10 15

Pro Gly Ala Glu Gly Thr Gln Gly Cys Thr Tyr Thr Leu Lys Ala Thr
20 25 30

Val Arg Thr Gly Glu Gln Gly Gln Arg Ala Met Glu Ser Pro Ala Glu 35 40 45

Gly Cys Thr Ser Arg Leu Lys Arg Ala Leu Pro Ala Ser Ala Arg Lys 50 55 60

Pro Gly Leu Trp Gly Cys Val Ile Val Asp Asp His Phe Gln Val Met
65 70 75 80

Ala Thr Ala Pro Val Leu Val Thr Ala Gly Pro Pro Ile Leu Leu Arg 85 90 95

His Pro Pro Leu Ser His Arg Ala Val Phe Arg Ala Ser Ala Gly Leu 100 105 110

Ser Cys Cys Ser Gln Thr Leu Ala Leu Arg Lys Ala Gly Gln Ser Thr 115 120 125

Ser Cys Ser Leu Arg Gly Gly Gln Val Phe Val Ser Lys Gly Gly Lys 130 135 140

Pro Gly Glu Arg Arg His Gln Ala Pro Glu Thr Phe Glu Met Thr Ser 145 150 155 160

Glu Asp Pro Gly Pro Leu Arg Val Thr Thr Ser Asp Ser Cys Leu Pro 165 170 175

Gln Ala Val Thr Asp Val

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<211> 430
<212> PRT
<213> Homo sapiens
<400> 3531
Met Phe Asp Gly Tyr Asp Ser Cys Ser Glu Asp Thr Ser Ser Ser Ser
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                  5
                                      10
                                                          15
Ser Ser Glu Glu Ser Glu Glu Glu Val Ala Pro Leu Pro Ser Asn Leu
                                 25
                                                      30
Pro Ile lle Lys Asn Asn Gly Gln Val Tyr Thr Tyr Pro Asp Gly Lys
                                                  45
                             40
Ser Gly Met Ala Thr Cys Glu Met Cys Gly Met Val Gly Val Arg Asp
     50
                         55
Ala Phe Tyr Ser Lys Thr Lys Arg Phe Cys Ser Val Ser Cys Ser Arg
                     70
                                          75
Ser Tyr Ser Ser Asn Ser Lys Lys Ala Ser Ile Leu Ala Arg Leu Gln
                                     90
                                                          95
Gly Lys Pro Pro Thr Lys Lys Ala Lys Val Leu Gln Lys Gln Pro Leu
            100
                                105
                                                     110
Val Ala Lys Leu Ala Ala Tyr Ala Gln Tyr Gln Ala Thr Leu Gln Asn
        115
                            120
                                                 125
Gln Ala Lys Thr Lys Ala Ala Val Ser Met Glu Gly Phe Ser Trp Gly
    130
                        135
                                             140
Asn Tyr Ile Asn Ser Asn Ser Phe Ile Ala Ala Pro Val Thr Cys Phe
                    150
                                        155
Lys His Ala Pro Met Gly Thr Cys Trp Gly Asp Ile Ser Glu Asn Val
                165
                                     170
                                                         175
Arg Val Glu Val Pro Asn Thr Asp Cys Ser Leu Pro Thr Lys Val Phe
                                185
                                                     190
Trp lle Ala Gly lle Val Lys Leu Ala Gly Tyr Asn Ala Leu Leu Arg
                                                 205
                            200
Tyr Glu Gly Phe Glu Asn Asp Ser Gly Leu Asp Phe Trp Cys Asn Ile
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<210> 3531

Cys Gly Ser Asp 11e His Pro Val Gly Trp Cys Ala Ala Ser Gly Lys Pro Leu Val Pro Pro Arg Thr lle Gln His Lys Tyr Thr Asn Trp Lys 250 245 Ala Phe Leu Val Lys Arg Leu Thr Gly Ala Lys Thr Leu Pro Pro Asp 260 265 Phe Ser Gln Lys Val Ser Glu Ser Met Gln Tyr Pro Phe Lys Pro Cys 280 285 Met Arg Val Glu Val Val Asp Lys Arg His Leu Cys Arg Thr Arg Val 290 295 300 Ala Val Val Glu Ser Val Ile Gly Gly Arg Leu Arg Leu Val Tyr Glu 310 315 Glu Ser Glu Asp Arg Thr Asp Asp Phe Trp Cys His Met His Ser Pro 325 330 Leu 11e His His 11e Gly Trp Ser Arg Ser 11e Gly His Arg Phe Lys 340 345 350 Arg Ser Asp Ile Thr Lys Lys Gln Asp Gly His Phe Asp Thr Pro Pro 360 365 His Leu Phe Ala Lys Val Lys Glu Val Asp Gln Ser Gly Glu Trp Phe 370 375 380 Lys Glu Gly Met Lys Leu Glu Ala 11e Asp Pro Leu Asn Leu Ser Thr 390 395 lle Cys Val Ala Thr lle Arg Lys Val Thr Gln Asn Phe Leu Leu Asn 410 Gly Leu Thr Thr Ser Gly Lys Leu Ala Pro Leu Gln His Gln 420 425 430

<210> 3532

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3532

Met Val Glu Gly Arg Arg Ala Leu Leu Gly Ala Trp Glu Ala Gly Phe

1 5 10 15

Arg Ala Ala Trp Ala Val Pro Pro Glu Gly Gln Asp Pro Thr Gly Gly 25 Ala Arg Ala Ala Thr Pro Gln Thr Asn Glu Phe Lys Gly Ala Thr Glu 45 Glu Ala Pro Ala Lys Glu Ser Pro His Thr Gly Glu Phe Lys Gly Ala 50 55 Ala Leu Val Ser Pro 11e Ser Lys Arg Met Leu Glu Arg Leu Ser Lys 70 75 Phe Glu Val Gly Asp Ala Glu Asn Val Ala Ser Tyr Glu Leu Phe Gly 85 90 Val Phe Leu Val Leu Leu Asp Val Thr Leu Val Leu Ala Asp Leu Ile 100 105 110 Phe Thr Asp Ser Lys Leu Tyr IIe Pro Leu Glu Tyr Arg Ser IIe Ser 115 120 125 Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe 130 135 140 Val Glu Gly Phe 145 <210> 3533 (211) 199 <212> PRT <213> Homo sapiens <400> 3533 Met His Ala Cys Val Asn Thr Pro Gly Ser Tyr Arg Cys Thr Cys Pro

 1
 5
 10
 15

 Gly Gly Tyr Arg Thr Leu Ala Asp Gly Lys Ser Cys Glu Asp Val Asp 20
 25
 30

 Glu Cys Val Gly Leu Gln Pro Val Cys Pro Gln Gly Thr Thr Cys 11e 35
 40
 45

 Asn Thr Gly Gly Ser Phe Gln Cys Val Ser Pro Glu Cys Pro Glu Gly 50
 55
 60

 Ser Gly Asn Val Ser Tyr Val Lys Thr Ser Pro Phe Gln Cys Glu Arg 65
 70
 75
 80

Asn Pro Cys Pro Met Asp Ser Arg Pro Cys Arg His Leu Pro Lys Thr Ile Ser Phe His Tyr Leu Ser Leu Pro Ser Asn Leu Lys Thr Pro Ile Thr Leu Phe Arg Met Ala Thr Ala Ser Ala Pro Gly Arg Ala Gly Pro Asn Ser Leu Arg Phe Gly Ile Val Gly Gly Asn Ser Arg Gly His Phe Val Met Gln Arg Ser Asp Arg Gln Thr Gly Asp Leu lle Leu Val Gln Asn Leu Glu Gly Pro Gln Thr Leu Glu Val Asp Val Asp Met Ser Glu Tyr Leu Asp Arg Ser Phe Gln Ala Asn His Val Ser Lys Val Thr Ile Phe Val Ser Pro Tyr Asp Phe

<210> 3534

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3534

Lys Glu Asp Gly

<210> 3535

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3535

Met Ser Met Met Ser Ser Arg Lys Thr Met Lys Ala Thr Ile Pro Pro

1 5 10 15

Met Met Ala Cys Pro Ala His Leu Arg 11e Phe Leu Glu Glu Asp Ala 20 25 30

Val Ala Pro Ser Thr Thr Arg Arg Gln His Trp Lys Gln Thr Gln Ser 35 40 45

Asn Arg Thr Pro Ser Ala Trp Leu Leu Ser Thr Lys Gln Arg Gly Asp
50
55
60

Gln Gln Asp Thr Asn His Lys Gly Thr Arg Thr Phe Ser His Cys Gln 65 70 75 80

Ser Ser Ser Asp Trp Ser Gly Glu Ile Trp Gly Gln Arg Pro Glu Leu

85

90

95

Ser Ala Leu Ser Leu Leu Leu Ala Ser Tyr Asn Ser Leu Val Val Leu 100 105 110

Arg Gln Leu Pro His Ala Glu Val Cys Pro Trp Ser Gly Asn His Pro 115 120 125

Ser Arg His Ser Asp Pro Lys Asn Ser Asp Leu Leu Ser Leu Gly Gly 130 135 140

Leu Ala Leu Ile Pro Ser Thr Val Leu Met Ser Val Ser Ser Lys Gly
145 150 155 160

Ala Ser Asp Val Ser Pro Thr Met His Phe Pro Tyr Ser Glu Lys Arg 165 170 175

<210> 3536

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3536

Met Asp Ser Ala Pro Ala Gly Ser Phe Ser Ala Ser Ser Phe Phe Asp

1 5 10 15

Leu Ser Val Thr Val Thr Arg Ala Lys Asn Ser Arg Gly Pro Ser Ser
20 25 30

Ser Pro Ser Glu Leu Gln Gly Ala His Cys Leu Thr Ser Ser Leu Ala 35 40 45

Ala Ala Cys Ser Val Ala Tyr Ser Ala Leu Trp Ser Ser Ser Pro Leu 50 55 60

Arg Ser Pro Trp Ser 11e Ser Ser 11e Thr Met Pro Arg Leu Ser Ser 65 70 75 80

Glu Glu Ser Ser Ala Ser Leu Leu Ala Gly Ala Asp Gly Arg Pro Pro 85 90 95

Arg Leu Leu Phe Leu Pro Phe Trp Val Asn Leu Leu Arg Leu Val Leu
100 105 110

Phe Leu Arg Pro Arg Arg Pro Leu Leu Gly Phe Leu Ala Ala Pro Arg 115 120 125

Ser Glu Pro Ala Cys Pro Val Thr Ser Pro Glu Ser Trp Ala Cys Val 130 135 140

Ser Glu Ala Gly Gly Val Gly Ala Ser Pro Gly Val Pro Ala Ser Ala 145 150 155 160

Ala Cys Val Gly Pro Ser Ser Ser Ser Arg Arg Leu Ile Cys Leu Arg 165 170 175

Thr Leu Val Ser Cys Ala Arg Ser Phe His Arg Thr Leu Gln Thr Pro 180 185 190

Ser Leu Pro Gly Ile Ser Leu Gly Met Ala Ala 195 200

<210> 3537

<211> 536

<212> PRT

<213> Homo sapiens

<400)> 35	537													
Met	Ser	Ala	Arg	Val	Pro	Val	Ser	Phe	Cys	He	Tyr	He	llis	Ala	Cys
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Val	Pro	Val	Phe	Leu	Arg	Val	Leu	Val	Cys	Ala	Arg	Val	His	Leu	Cys
			20					25					30		
Val	Cys	Gln	Ser	Met	Cys	Ala	Cys	Val	Cys	Leu	Ser	Ala	Tyr	Pro	Cys
		35					40					45			
Val	His	Val	Cys	Val	Cys	Gln	Arg	He	Arg	Val	Cys	Met	Cys	Val	Ser
	50					55					60				
Val	Ser	Leu	Thr	Met	Cys	Ala	Cys	Val	Cys	Gln	Cys	Ile	Arg	Val	Cys
65					70					75					80
He	Cys	Val	Ser	Val	His	Val	Ser	Ala	Cys	Ala	Cys	Val	Tyr	Leu	Cys
				85					90					95	
Val	Ser	lle		Gly	Pro	Pro	Arg		Gly	Ala	His	Arg	Pro	Pro	G1r
			100					105					110		
Arg	Thr		His	Cys	Ser	Asp		Ser	Ser	Asp	Thr		Ser	Phe	Туз
0.1		115	C1		D	17 1	120	T 1	C		C	125	T.	D	TI
Gly		vai	GJu	Arg	Pro		Asp	11e	Ser	Leu		Pro	Tyr	Pro	ihi
Λ	130	C1	Λ	Т	C1	135	Λ	۸ ـ	C1	A	140	C	т	1	C1.
	ASH	GIU	ASP	lyr	150	nis	ASP	ASP	Glu		ASP	ser	Tyr	Leu	
145 Pro	Acn	Sor	Pro	Glu		Gly	Ara	Lou	Glu	155 Asp	Δla	Lou	Met	Hic	160
110	пър	361	110	165	110	dly	Mg	Leu	170	пор	V 1 CI	Leu	MCC	175	110
Pro	Ala	Tvr	Pro		Pro	Pro	Val	Pro		Pro	Arg	Lvs	Pro		Phe
		.,,	180				1	185			5	, 0	190		
Ser	Asp	Met	Pro	Arg	Ala	His	Ser		Thr	Ser	Lvs	Gly	Pro	Gly	Pro
	•	195					200				•	205		·	
Leu	Leu	Pro	Pro	Pro	Pro	Pro	Lys	His	Gly	Leu	Pro	Asp	Val	Gly	Leu
	210					215					220				
Ala	Ala	Glu	Asp	Ser	Lys	Arg	Asp	Pro	Leu	Cys	Pro	Arg	Arg	Ala	Glu
225					230					235					240
Pro	Cys	Pro	Arg	Val	Pro	Ala	Thr	Pro	Arg	Arg	Met	Ser	Asp	Pro	Pro
				245					250					255	
Leu	Ser	Thr	Met	Pro	Thr	Ala	Pro	Gly	Leu	Arg	Lys	Pro	Pro	Cys	Pho
			260					265					270		

Arg	Glu	Ser	Ala	Ser	Pro	Ser	Pro	Glu	Pro	Trp	Thr	Pro	G1 y	His	Gly
		275					280					285			
Ala	Cys	Ser	Thr	Ser	Ser	Ala	Ala	He	Met	Ala	Thr	Ala	Thr	Ser	Arg
	290					295					300				
Asn	Cys	Asp	Lys	Leu	Lys	Ser	Phe	His	Leu	Ser	Pro	Arg	Gly	Pro	Pro
305					310					315					320
Thr	Ser	Glu	Pro	Pro	Pro	Val	Pro	Ala	Asn	Lys	Pro	Lys	Phe	Leu	Lys
				325					330					335	
He	Ala	Glu	Glu	Asp	Pro	Pro	Arg	Glu	Ala	Ala	Met	Pro	Gly	Leu	Phe
			340					345					350		
Val	Pro	Pro	Val	Ala	Pro	Arg	Pro	Pro	Ala	Leu	Lys	Leu	Pro	Val	Pro
		355					360					365			
Glu	Ala	Met	Ala	Arg	Pro	Λla	Val	Leu	Pro	Arg	Pro	Glu	Lys	Pro	Gln
	370					375					380				
Leu	Pro	His	Leu	Gln	Arg	Ser	Pro	Pro	Asp	Gly	Gln	Ser	Phe	Arg	Ser
385					390					395					400
Phe	Ser	Phe	Glu	Lys	Pro	Arg	Gln	Pro	Ser	Gln	Ala	Asp	Thr	Gly	Gly
				405					410					415	
Asp	Asp	Ser	Лsp	Glu	Asp	Tyr	Glu	Lys	Val	Pro	Leu	Pro	Asn	Ser	Val
Asp	Asp	Ser	Лsр 420	Glu	Asp	Tyr	Glu	Lys 425	Val	Pro	Leu	Pro	Asn 430	Ser	Val
			420					425							
			420					425					430		
Phe	Val	Asn 435	420 Thr	Thr	Glu	Ser	Cys 440	425 Glu	Val	Glu	Arg	Leu 445	430	Lys	Ala
Phe	Val	Asn 435	420 Thr	Thr	Glu	Ser	Cys 440	425 Glu	Val	Glu	Arg	Leu 445	430 Phe	Lys	Ala
Phe Thr	Va] Ser 450	Asn 435 Pro	420 Thr Arg	Thr Gly	Glu Glu	Ser Pro 455	Cys 440 Gln	425 Glu Asp	Val Gly	Glu Leu	Arg Tyr 460	Leu 445 Cys	430 Phe	Lys Arg	Ala Asn
Phe Thr	Va] Ser 450	Asn 435 Pro	420 Thr Arg	Thr Gly	Glu Glu	Ser Pro 455	Cys 440 Gln	425 Glu Asp	Val Gly	Glu Leu	Arg Tyr 460	Leu 445 Cys	430 Phe Ile	Lys Arg	Ala Asn
Phe Thr Ser 465	Val Ser 450 Ser	Asn 435 Pro Thr	420 Thr Arg Lys	Thr Gly Ser	Glu Glu Gly 470	Ser Pro 455 Lys	Cys 440 Gln Val	425 Glu Asp Leu	Val Gly Val	Glu Leu Val 475	Arg Tyr 460 Trp	Leu 445 Cys Asp	430 Phe Ile	Lys Arg Thr	Ala Asn Ser 480
Phe Thr Ser 465	Val Ser 450 Ser	Asn 435 Pro Thr	420 Thr Arg Lys	Thr Gly Ser	Glu Glu Gly 470	Ser Pro 455 Lys	Cys 440 Gln Val	425 Glu Asp Leu	Val Gly Val	Glu Leu Val 475	Arg Tyr 460 Trp	Leu 445 Cys Asp	430 Phe Ile Glu	Lys Arg Thr	Ala Asn Ser 480
Phe Thr Ser 465 Asn	Val Ser 450 Ser Lys	Asn 435 Pro Thr	420 Thr Arg Lys	Thr Gly Ser Asn 485	Glu Glu Gly 470 Tyr	Ser Pro 455 Lys Arg	Cys 440 Gln Val	425 Glu Asp Leu Phe	Val Gly Val Glu 490	Glu Leu Val 475 Lys	Arg Tyr 460 Trp Asp	Leu 445 Cys Asp	430 Phe Ile Glu	Lys Arg Thr Phe 495	Ala Asn Ser 480 Tyr
Phe Thr Ser 465 Asn	Val Ser 450 Ser Lys	Asn 435 Pro Thr	420 Thr Arg Lys	Thr Gly Ser Asn 485	Glu Glu Gly 470 Tyr	Ser Pro 455 Lys Arg	Cys 440 Gln Val	425 Glu Asp Leu Phe	Val Gly Val Glu 490	Glu Leu Val 475 Lys	Arg Tyr 460 Trp Asp	Leu 445 Cys Asp	430 Phe Ile Glu Lys	Lys Arg Thr Phe 495	Ala Asn Ser 480 Tyr
Phe Thr Ser 465 Asn	Val Ser 450 Ser Lys	Asn 435 Pro Thr Val Gly	420 Thr Arg Lys Arg Glu 500	Thr Gly Ser Asn 485 Val	Glu Gly 470 Tyr Leu	Ser Pro 455 Lys Arg	Cys 440 Gln Val lle	425 Glu Asp Leu Phe Ser 505	Val Gly Val Glu 490 Val	Glu Leu Val 475 Lys	Arg Tyr 460 Trp Asp	Leu 445 Cys Asp Ser	430 Phe Ile Glu Lys Val	Lys Arg Thr Phe 495 Glu	Ala Asn Ser 480 Tyr
Phe Thr Ser 465 Asn	Val Ser 450 Ser Lys	Asn 435 Pro Thr Val Gly	420 Thr Arg Lys Arg Glu 500	Thr Gly Ser Asn 485 Val	Glu Gly 470 Tyr Leu	Ser Pro 455 Lys Arg	Cys 440 Gln Val lle	425 Glu Asp Leu Phe Ser 505	Val Gly Val Glu 490 Val	Glu Leu Val 475 Lys	Arg Tyr 460 Trp Asp	Leu 445 Cys Asp Ser	430 Phe Ile Glu Lys Val 510	Lys Arg Thr Phe 495 Glu	Ala Asn Ser 480 Tyr
Phe Thr Ser 465 Asn Leu Tyr	Val Ser 450 Ser Lys Glu	Asn 435 Pro Thr Val Gly	420 Thr Arg Lys Arg Glu 500 His	Thr Gly Ser Asn 485 Val	Glu Gly 470 Tyr Leu Leu	Ser Pro 455 Lys Arg Phe Pro	Cys 440 Gln Val He Val Ser 520	425 Glu Asp Leu Phe Ser 505	Val Gly Val Glu 490 Val	Glu Leu Val 475 Lys	Arg Tyr 460 Trp Asp	Leu 445 Cys Asp Ser Met	430 Phe Ile Glu Lys Val 510	Lys Arg Thr Phe 495 Glu	Ala Asn Ser 480 Tyr

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<211> 472
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<213> Homo sapiens
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Val Gln Cys Glu Pro His Leu Val Glu Ser Gly Gly Leu Val Glu
             20
                                 25
                                                      30
Pro Gly Arg Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Ala Leu
                             40
                                                  45
Gly Asp Tyr Ala Val Ser Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu
                         55
                                             60
Glu Trp Val Gly Phe lle Arg Ser Glu Thr Leu Gly Gly Thr Pro Glu
                     70
                                         75
65
Asn Ala Ala Ser Leu Glu Gly Arg Cys Leu Ile Ser Arg Asp Asp Ser
                                     90
Lys Asn Ser Ala Tyr Leu His Leu Ser Ser Leu Lys Phe Glu Asp Thr
            100
                                 105
                                                     110
Gly Arg Tyr Tyr Cys Met Ala Asp Arg Tyr Asp Glu Arg Asp Tyr Phe
                            120
                                                 125
Tyr Val Gly Gly Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser
                        135
                                             140
Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr
145
                    150
                                        155
                                                             160
Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
                                    170
Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
            180
                                 185
                                                     190
His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
                                                 205
                            200
Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr 11e
                        215
                                             220
Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val
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Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala
				245					250					255	
Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro
			260					265					270		
Lys	Asp	Thr	Leu	Met	lle	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val
		275					280					285			
Val	Asp	Va]	Ser	His	Glu	Лѕр	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val
	290					295					300				
Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln
305					310					315					320
Tyr	۸sn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln
				325					330					335	
Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala
			340					345					350		
Leu	Pro	Ala	Pro	He	Glu	Lys	Thr	He	Ser	Lys	Ala	Lys	Gly	Gln	Pro
		355					360					365			
Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr
	370					375					380				
Lys	Λsn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser
385					390					395					400
Asp	He	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr
				405					410					415	
Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr
			420					425					430		
Ser	Lys	Leu	Thr	Va]	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe
		435					440					445			
Ser	Cys	Ser	Val-	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys
	450					455					460				
Ser	Leu	Ser	Leu	Ser	Pro	\overline{G} ly	Lys								
465					470										

<211> 447

<212> PRT

<213≻ Homo sapiens

<400)> 35	539													
Met	Glu	Phe	Gly	Leu	Thr	Trp	Val	Phe	Leu	Val	Ala	Leu	Leu	Arg	Gly
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Val	Gln	Cys	GIn	Val	His	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Gly	Gln
			20					25					30		
Pro	Gly	Lys	Ser	Leu	Lys	Leu	Ser	Cys	Gln	Ala	Phe	llis	Leu	Asp	Phe
		35					40					45			
Lys	His	Leu	Gly	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
	50					55					60				
Glu	Trp	Leu	Ala	Val	lle	Trp	Tyr	Asp	Gly	Ser	Asn	lle	Phe	Tyr	Ala
65					70					75					80
Asp	Ser	11e	Lys	Asp	Arg	Phe	Пe	Пе	Ser	Arg	Asp	Asn	Gly	Asn	Arg
				85					90					95	
Thr	Leu	Tyr		Gln	Met	Asp	Asn		Arg	Ala	Asp	Asp	Thr	Ala	Val
			100					105					110		
Tyr	Phe		Val	Thr	Gly	Arg		Glu	Ser	Gly	Ser		Leu	Trp	Gly
		115					120					125			
Gln		Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser		Lys	Gly	Pro	Ser
	130					135	_		.~		140	0.1	6.1	<i>-</i>	
	Phe	Pro	Leu	Ala		Ser	Ser	Lys	Ser		Ser	Gly	G1 y	Thr	
145	,	0.1	0		150			T	131	155		12 1		C.1	160
Ala	Leu	61 y	Cys		Val	Lys	Asp	lyr		Pro	Ala	Val	Leu		Ser
C	C1	1	т	165	1	C	C	V - 1	170	ть	V. 1	D	C	175	C
Ser	GIŸ	Leu		Ser	Leu	Ser	261		vai	ınr	v 81 1	Pro	Ser 190	261	ser
Lou	Cly	The	180	Thr	Tur	He	Cvc	185 Asp	Vo.1	Acn	Hic	Lvc		Gly	Aco
Leu	OTA	195	OIII	1113	1 y 1	116	200	asii	101	лан	1112	205	110	Oly	กอน
Thr	Lve		Asp	lve	lve	Va]		Pro	lve	Ser	Cvs		Lvs	Thr	His
1113	210	, 41	пэр	Lyo	Lys	215	Giu	, , 0	1-3.0	U.C.J	220	лэр	د. رب		1135
Thr		Pro	Pro	Cvs	Pro	Ala	Pro	Glu	Len	Len		Glv	Pro	Ser	Val
225	0,0			-,5	230		. 10	O, u), C (I	235	017	·· • · y	0		240
	Len	Phe	Pro	Pro		Pro	Lvs	Asp	Thr		Met	He	Ser	Arg	
				245	€ وس				250					255	
Pro	Glu	Val	Thr		Val	Val	Val	Asp		Ser	His	Glu	Asp		Glu
				- , -									10		

			260					265					270		
Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys
		275					280					285			
Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser
	290					295					300				
Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys
305					310					315					320
Cys	Lys	Val	Ser	Λsn	Lys	Ala	Leu	Pro	Ala	Pro	He	Glu	Lys	Thr	lle
				325					330					335	
Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro
			340					345					350		
Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu
		355					360					365			
Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Пe	Ala	Val	Glu	Trp	Glu	Ser	Asn
	370					375					380				
Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser
385					390					395					400
Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg
				405					410					415	
Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Va]	Met	His	Glu	Ala	Leu
			420					425					430		
His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys	
		435					440					445			

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3540

Met Leu Thr Arg Leu Val Leu Ser Ala His Leu Ser Ser Thr Thr Ser I row Pro Pro Trp Thr His Ala Ala IIe Ser Trp Glu Leu Asp Asn Val Leu Pro Pro Ser Pro Arg IIe Trp Pro Gln Val Thr Pro Thr Gly Arg Ser

Ala Ser Val Arg Ser Glu Gly Asn Thr Ser Ser Leu Trp Asn Phe Ser Ala Gly Gln Asp Val His Ala Ile Val Thr Arg Thr Cys Glu Ser Val Leu Ser Ser Ala Val Tyr Thr His Gly Cys Gly Cys Val Arg Ser Ala Thr Asn lle Thr Cys Gln Ser Ser Gly Gln Gln Arg Gln Ala Ala Arg Gln Glu Glu Glu Asn Ser Ile Cys Lys Ala His Asp Ser Arg Glu Gly Arg Leu Gly Tyr Pro Leu Ser Ala His Gln Pro Gly Ser Gly Gly Pro Asn <210> 3541 <211> 805 <212> PRT <213> Homo sapiens <400> 3541 Met Ala Ala Ser Gly Val Pro Arg Gly Cys Asp Ile Leu Ile Val Tyr Ser Pro Asp Ala Lys Glu Trp Cys Gln Tyr Leu Gln Thr Leu Phe Leu Ser Ser Arg Gln Val Arg Ser Gln Lys Ile Leu Thr His Arg Leu Gly Pro Glu Ala Ser Phe Ser Ala Glu Asp Leu Ser Leu Phe Leu Ser Thr Arg Cys Val Val Leu Leu Ser Ala Glu Leu Val Gln His Phe His Lys Pro Ala Leu Leu Pro Leu Leu Gln Arg Ala Phe His Pro Pro His Arg Val Val Arg Leu Leu Cys Gly Val Arg Asp Ser Glu Glu Phe Leu

			100					105					110		
Asp	Phe	Phe	Pro	Λsp	Trp	Ala	His	Trp	Gln	Glu	Leu	Thr	Cys	Asp	Asp
		115					120					125			
Glu	Pro	Głu	Thr	Tyr	Val	Ala	Ala	Val	Lys	Lys	Ala	11e	Ser	Glu	Asp
	130					135					140				
Ser	Gly	Cys	Asp	Ser	Val	Thr	Asp	Thr	Glu	Pro	G]u	Asp	Glu	Lys	Val
145					150					155					160
Val	Ser	Tyr	Ser	Lys	Gln	Gln	Asn	Leu	Pro	Thr	Val	Thr	Ser	Pro	Gly
				165					170					175	
Asn	Leu	Met	Val	Val	Gln	Pro	Asp	Arg	Ile	Arg	Cys	G]y	Ala	Glu	Thr
			180					185					190		
Thr	Val	Tyr	Val	He	Val	Arg	Cys	Lys	Leu	Asp	Asp	Arg	Val	Ala	Thr
		195					200					205			
Glu	Ala	Glu	Phe	Ser	Pro	Glu	Asp	Ser	Pro	Ser	Val	Arg	Met	Glu	Ala
	210					215					220				
Lys	Val	Glu	Asn	Glu	Tyr	Thr	lle	Ser	Val	Lys	Ala	Pro	Asn	Leu	Ser
225					230					235					240
Ser	Gly	Asn	Val	Ser	Leu	Lys	lle	Tyr	Ser	Gly	Asp	Leu	Val	Val	Cys
				245					250					255	
Glu	Thr	Val	lle	Ser	Tyr	Tyr	Thr	Asp	Met	Gl u	Glu	He	Gly	Asn	Leu
			260					265					270		
Leu	Ser	Asn	Ala	Ala	Asn	Pro	Val	Glu	Phe	Met	Cys	Gln	Ala	Phe	Lys
		275					280					285			
He	Va]	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu	Thr	Glu	Ser
	290					295					300				
l.eu	Lys	Asn	Asn	lle	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe	Gly	lle	Asn
305					310					315					320
Gln	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp	Glu	Glu	Leu
Pro				325					330					335	
	Thr	Leu	Leu		Phe	Ala	Ala	Lys		Gly	Leu	Lys	Asn		Thr
	Thr	Leu	Leu 340		Phe	Ala	Ala	Lys 345		Gly	Leu	Lys	Asn 350		Thr
Ala			340	His			Ala Gly	345	Tyr				350	Leu	
Ala			340	His				345	Tyr				350	Leu	
	Leu	Leu 355	340 Leu	His Thr	Cys	Pro	Gly	345 Ala	Tyr Leu	Gln	Ala	Tyr 365	350 Ser	Leu Val	Ala
	Leu	Leu 355	340 Leu	His Thr	Cys	Pro	G1 y 360	345 Ala	Tyr Leu	Gln	Ala	Tyr 365	350 Ser	Leu Val	Ala

385					390					395					400
Leu	Lys	Ser	His	He	Lys	Glu	Glu	Leu	Met	His	Gly	Glu	Glu	Ala	Asp
				405					410					415	
Ala	Val	Tyr	Glu	Ser	Met	Ala	His	Leu	Ser	Thr	Asp	Leu	Leu	Met	Lys
			420					425					430		
Cys	Ser	Leu	Asn	Pro	Gly	Cys	Asp	Glu	Asp	Leu	Tyr	Glu	Ser	Met	Ala
		435					440					445			
Ala	Phe	Val	Pro	Ala	Ala	Thr	Glu	Asp	Leu	Tyr	Val	Glu	Met	Leu	Gln
	450					455					460				
Ala	Ser	Thr	Ser	Asn	Pro	Ile	Pro	G1 y	Asp	Gly	Phe	Ser	Arg	Ala	Thr
465					470					475					480
Lys	Asp	Ser	Met	He	Arg	Lys	Phe	Leu	Glu	Gly	Asn	Ser	Met	Gly	Met
				485					490					495	
Thr	Asn	Leu	Glu	Arg	Asp	Gln	Cys	His	Leu	Gly	Gln	Glu	Glu	Asp	Val
			500					505					510		
Tyr	His	Thr	Val	Asp	Asp	Asp	Glu	Ala	Phe	Ser	Val	Asp	Leu	Ala	Ser
		515					520					525			
Arg	Pro	Pro	Val	Pro	Va]	Pro	Arg	Pro	Glu	Thr	Thr	Ala	Pro	Gly	Ala
	530					535					540				
His	Gln	Leu	Pro	Asp	Asn	Glu	Pro	Tyr	lle	Phe	Lys	Val	Phe	Ala	Glu
					550					555					560
545															
	Ser	Gln	Glu	Arg	Pro	Gly	Asn	Phe	Tyr	Val	Ser	Ser	Glu	Ser	He
	Ser	Gln	Glu	Arg 565	Pro	Gly	Asn	Phe	Tyr 570	Val	Ser	Ser	Glu	Ser 575	lle
Lys				565					570				Glu Gln	575	
Lys				565					570					575	
Lys Arg	Lys	Gly	Pro 580	565 Pro	Val	Arg	Pro	Trp 585	570 Arg	Asp	Arg	Pro	Gln	575 Ser	Ser
Lys Arg	Lys	Gly	Pro 580	565 Pro	Val	Arg	Pro	Trp 585	570 Arg	Asp	Arg	Pro	G1n 590	575 Ser	Ser
Lys Arg Ile	Lys Tyr	Gly Asp 595	Pro 580 Pro	565 Pro Phe	Va] Ala	Arg Gly	Pro Met 600	Trp 585 Lys	570 Arg Thr	Asp Pro	Arg Gly	Pro Gln 605	G1n 590	575 Ser Gln	Ser Leu
Lys Arg Ile	Lys Tyr	Gly Asp 595	Pro 580 Pro	565 Pro Phe	Va] Ala	Arg Gly	Pro Met 600	Trp 585 Lys	570 Arg Thr	Asp Pro	Arg Gly	Pro Gln 605	Gln 590 Arg	575 Ser Gln	Ser Leu
Lys Arg Ile	Lys Tyr Thr 610	Gly Asp 595 Leu	Pro 580 Pro Gln	565 Pro Phe Glu	Val Ala Gln	Arg Gly Val 615	Pro Met 600 Lys	Trp 585 Lys Leu	570 Arg Thr Gly	Asp Pro	Arg Gly Val 620	Pro Gln 605 Asn	Gln 590 Arg	575 Ser Gln Asp	Ser Leu Glu
Lys Arg Ile	Lys Tyr Thr 610	Gly Asp 595 Leu	Pro 580 Pro Gln	565 Pro Phe Glu	Val Ala Gln	Arg Gly Val 615	Pro Met 600 Lys	Trp 585 Lys Leu	570 Arg Thr Gly	Asp Pro	Arg Gly Val 620	Pro Gln 605 Asn	Gln 590 Arg Val	575 Ser Gln Asp	Ser Leu Glu
Arg Ile Ile Ala 625	Lys Tyr Thr 610 Val	Gly Asp 595 Leu Leu	Pro 580 Pro Gln His	565 Pro Phe Glu Phe	Val Ala Gln Lys 630	Arg Gly Val 615 Glu	Pro Met 600 Lys Trp	Trp 585 Lys Leu	570 Arg Thr Gly Leu	Asp Pro 11e Asn 635	Arg Gly Val 620 Gln	Pro Gln 605 Asn Lys	Gln 590 Arg Val	575 Ser Gln Asp	Ser Leu Glu Ser 640
Arg Ile Ile Ala 625	Lys Tyr Thr 610 Val	Gly Asp 595 Leu Leu	Pro 580 Pro Gln His	565 Pro Phe Glu Phe	Val Ala Gln Lys 630	Arg Gly Val 615 Glu	Pro Met 600 Lys Trp	Trp 585 Lys Leu	570 Arg Thr Gly Leu	Asp Pro 11e Asn 635	Arg Gly Val 620 Gln	Pro Gln 605 Asn Lys	Gln 590 Arg Val	575 Ser Gln Asp	Ser Leu Glu Ser 640
Lys Arg Ile Ala 625 Glu	Lys Tyr Thr 610 Val	Gly Asp 595 Leu Leu Phe	Pro 580 Pro Gln His	565 Pro Phe Glu Phe Phe 645	Val Ala Gln Lys 630 Gln	Arg Gly Val 615 Glu	Pro Met 600 Lys Trp Glu	Trp 585 Lys Leu Gln Asn	570 Arg Thr Gly Leu Leu 650	Asp Pro He Asn 635 Lys	Arg Gly Val 620 Gln Arg	Pro Gln 605 Asn Lys Leu	Gln 590 Arg Val	575 Ser Gln Asp Arg Asp 655	Ser Leu Glu Ser 640 Ser
Lys Arg Ile Ala 625 Glu	Lys Tyr Thr 610 Val	Gly Asp 595 Leu Leu Phe	Pro 580 Pro Gln His	565 Pro Phe Glu Phe Phe 645	Val Ala Gln Lys 630 Gln	Arg Gly Val 615 Glu	Pro Met 600 Lys Trp Glu	Trp 585 Lys Leu Gln Asn	570 Arg Thr Gly Leu Leu 650	Asp Pro He Asn 635 Lys	Arg Gly Val 620 Gln Arg	Pro Gln 605 Asn Lys Leu	Gln 590 Arg Val Lys	575 Ser Gln Asp Arg Asp 655	Ser Leu Glu Ser 640 Ser

Val Glu Phe Gly Val Tyr Glu Ser Gly Pro Arg Lys Ser Val Ile Pro Pro Arg Thr Glu Leu Arg Arg Gly Asp Trp Lys Thr Asp Ser Thr Ser Ser Thr Ala Ser Ser Thr Ser Asn Arg Ser Ser Thr Arg Ser Leu Leu Ser Val Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro Glu Val Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr Pro Thr Met Ser Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala Ser Gln Arg Pro Pro Thr Arg Glu Thr Phe His Pro Pro Pro Val Pro Pro Arg Gly Arg

<210> 3542

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3542

 Met Gly Trp Gly Cys Arg Val
 Pro Gly Trp Gly Gly Ala Ala Leu Gly

 1
 5
 10
 15

 Arg Pro Asp Phe Gly Thr Gly Leu Arg Ala Arg Val
 Ser Gly Pro Gly

 20
 25
 30

 Ser Ala Gly Phe Arg Ala Glu Lys Glu Gly Gln Arg Lys Arg Ser Gly

 35
 40
 45

 Ser Pro Pro Ala Pro Ala Ser Leu Pro Glu Tyr Lys Pro Leu Glu Ala
 Ala Glu Ala

 50
 55
 60

 Arg Phe Trp Val Ala Ala Ala Ala Gln Pro Phe Arg Ser Pro Leu Leu Pro
 80

 Thr Asp Val Tyr Ser Cys Ser Leu Tyr Phe Ser Leu His Ser Pro Val

				85					90					95	
Glu	Pro	Pro	Arg	Gln	Arg	Arg	Gly	Arg	Val	Leu	Leu	Leu	Ser	Arg	Leu
			100					105					110		
Arg	Leu	Pro	Pro	Ser	His	Pro	Thr	Ala	Gln	Glu	Glu	Leu	Arg	Ala	Arg
		115					120					125			
Pro	Trp	Asp	Gly	Arg	Ser	Leu	Gly	Leu	Leu	Leu	Ala	Arg	Ala	Leu	Pro
	130					135					140				
Gly	Val	Ala	Ala	Gly	Pro	Ser	Pro	Arg	Arg	Gly	Gly	His	Ser	Pro	Gly
145					150					155					160
Ala	Ala	Glu	Asn	Glu	Gly	Ser	Trp	Ala	Gly	Met	Leu	Asn	Phe	Pro	Ser
				165					170					175	
Pro	Thr	Phe	Leu	Ser	Gln	Leu	Thr	Gly	Met	Cys	Ser	Ser	Ser	Ala	Arg
			180					185					190		
Arg	Pro	Ala	Pro	Arg	Arg	Ser	Thr	Thr	Arg	Gly	Leu	Arg	Asn	Tyr	Lys
		195					200					205			
Ser	Leu	His	Pro	Pro	Arg	Gln	Gly	Gln	Glu	Arg	Arg	Gly	Ala	Gly	Arg
	210					215					220				
Ser	Gly	Ala	Arg	Trp	Trp	Glu	Leu	Gly	Thr	Asn	Lys	Gly	Gly	Cys	Gly
225					230					235					240
Glu	Arg	Cys	Leu	Leu	Cys	Thr	Gly	Gln	Phe	Ala	Arg	Tyr	Thr	Cys	Ser
				245					250					255	
Leu	Ser	Asn	Leu	Arg	Arg	Asn	Pro	Val	Arg	His	Tyr	Cys	He	Gln	Leu
			260					265					270		
Arg	Glu	Ser	Leu	Thr	Thr	Gly	Gln	Thr	Ser	Gln	Ser	Ser	Gln	Val	Val
		275					280					285			
Glu	Met	Ala	Ser	Asn	Pro	Glu	Pro								
	290					295									

⟨211⟩ 377

<212> PRT

<213> Homo sapiens

<400> 3543

Met Ala Thr lle Pro Asp Trp Lys Leu Gln Leu Leu Ala Arg Arg Arg

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Gln	Glu	Glu	Ala	Ser	Val	Arg	Gly	Arg	Glu	Lys	Ala	Glu	Arg	Glu	Arg
			20					25					30		
Leu	Ser	G1n	Met	Pro	Ala	Trp	Lys	Arg	G] y	Leu	Leu	Glu	Arg	Arg	Arg
		35					40					45			
Ala	Lys	Leu	Gly	Leu	Ser	Pro	Gly	Glu	Pro	Ser	Pro	Val	Leu	Gly	Thr
	50					55					60				
Val	G]u	Ala	Gly	Pro	Pro	Asp	Pro	Asp	Glu	Ser	Ala	Val	Leu	Leu	Glu
65					70					75					80
Thr	He	Gly	Pro	Val	His	Gln	Asn	Arg	Phe	He	Arg	Gln	Glu	Arg	Gln
				85					90					95	
Gln	Gln	G1n	G1n	Gln	Gln	Gln	Arg	Ser	G1 u	Glu	Leu	Leu	Лlа	Glu	Arg
			100					105					110		
Lys	Pro	Gly	Pro	Leu	Glu	Ala	Arg	Glu	Arg	Arg	Pro	Ser	Pro	Gly	G1 u
		115					120					125			
Met		Asp	Gln	Ser	Pro	Lys	Gly	Arg	Glu	Ser		Glu	Glu	Arg	Leu
	130					135					140				
_	Pro	Arg	Glu	Thr		Glu	Arg	Arg	Leu		He	Gly	Gly	Ala	
145					150		0.1			155	m		0.1		160
Glu	Leu	Ser	Leu		Pro	Leu	Glu	Ala		Asp	Trp	Arg	GIn		Pro
61	0.1		0.7	165		6	C		170	C	61	. 1	Tr.	175	т
Gly	Glu	Val		Asp	Arg	Ser	Ser		Leu	Ser	Glu	Ala		Lys	Irp
	,	C	180	C1 .	C1	TI.	D	185	Δ	C	1	A	190	A 1 -	C1
Arg	Leu		Pro	GIY	GIU	Thr		GIU	Arg	Ser	Leu		Leu	Ala	610
Can	A ~	195	C1s	Can	Dwa	A 20.00	200	Lua	C1	Vol.	C1	205	A 20 cr	Lou	Con
ser	210	Glu	GIII	ser	F10	Arg 215	Arg	Lys	GIU	vai	220	Se1	W1 B	reu	261
Pro		Glu	Sor	Ala	Tyr	Gln	lve	ا ما	Glv	Leu		Glv	Ala	His	Lve
225	Oly	Oju	561	MIG	230	0111	Lys	Leu	01,	235	1111	dry	Mid	111.5	240
	Arg	Pro	Asp	Ser		Glu	Ser	Gln	Glu		Ser	Leu	Va1	Gln	
	8			245	6				250					255	
Glu	Ala	Thr	Glu		Arg	Leu	Arg	Ser		Glu	Glu	Arg	Gln		Tvr
			260	·			Ü	265	•			Ü	270	•	•
Ser	Glu	Glu		Gly	Arg	Lys	Glu		Trp	Pro	Val	Pro		Val	Ala
		275		-	_	,	280		-			285	-		
Pro	Lys	Glu	Thr	Ala	Glu	Leu	Ser	Glu	Thr	Leu	Thr	Arg	Glu	Ala	Gln

Gly Asn Ser Ser Ala Gly Val Glu Ala Ala Glu Gln Arg Pro Val Glu Asp Gly Glu Arg Gly Met Lys Pro Thr Glu Gly Trp Lys Trp Thr Leu Ile Met Ser Leu Ala Gly Lys Gly Asn Gln His Leu Val Thr Cys Phe Pro His Pro Val Ser Gly Gly Arg Ala Asn Cys Pro Ile Ser Thr Leu Ile Gln Ser Pro Trp Cys Gly Trp Gly

<210> 3544

<211> 1215

<212> PRT

<213> Homo sapiens

<400> 3544

Met Glu lle Gln Val Met Ile Gln Phe Leu Pro Val Ile Leu Met Gln Leu Phe Arg Val Leu Thr Asn Met Thr His Glu Asp Asp Val Pro Ile Asn Cys Thr Met Val Leu Leu His Ile Val Ser Lys Cys His Glu Glu Gly Leu Asp Ser Tyr Leu Arg Ser Phe Ile Lys Tyr Ser Phe Arg Pro Glu Lys Pro Ser Ala Pro Gln Ala Gln Leu lle His Glu Thr Leu Ala Thr Thr Met lle Ala Ile Leu Lys Gln Ser Ala Asp Phe Leu Ser Ile Asn Lys Leu Leu Lys Tyr Ser Trp Phe Phe Phe Glu Ile Ile Ala Lys

Ser Met Ala Thr Tyr Leu Leu Glu Glu Asn Lys Ile Lys Leu Pro Arg

Gly	Gln	Arg	Phe	Pro	Glu	Thr	Tyr	His	His	Val	Leu	His	Ser	Leu	Leu
	130					135					140				
Leu	Ala	He	Пe	Pro	His	Val	Thr	He	Arg	Tyr	Ala	Glu	Пe	Pro	Asp
145					150					155					160
Glu	Ser	Arg	Asn	Val	Asn	Tyr	Ser	Leu	Ala	Ser	Phe	Leu	Lys	Arg	Cys
				165					170					175	
Leu	Thr	Leu	Met	Asp	Arg	Gly	Phe	He	Phe	Asn	Leu	Пe	Asn	Asp	Tyr
			180					185					190		
Ile	Ser	G1y	Phe	Ser	Pro	Lys	Asp	Pro	Lys	Val	Leu	Ala	Glu	Tyr	Lys
		195					200					205			
Phe	Glu	Phe	Leu	Gln	Thr	11e	Cys	Asn	His	Glu	His	Tyr	Ile	Pro	Leu
	210					215					220				
	Leu	Pro	Met	Ala	Phe	Ala	Lys	Pro	Lys		Gln	Arg	Val	Gln	Asp
225					230					235					240
Ser	Asn	Leu	Glu		Ser	Leu	Ser	Asp		Tyr	Cys	Lys	His		Phe
				245					250					255	
Leu	Val	Gly		Leu	Leu	Arg	Glu		Ser	He	Ala	Leu		Asp	Asn
	0.1		260	m				265					270		~ .
Tyr	Glu	He	Arg	Tyr	Thr	Ala		Ser	Val	He	Lys		Leu	Leu	lle
1	11: -	275	DL -	Δ	Tl	A	280	C1	112 -	1	Δ	285	C1	A 1 .	1
Lys	290	Ala	rne	ASP	IIII	295	LÀL	GIB	ПIS	Lys	300	6111	6111	MIA	Lys
	230					230					300				
He	Ala	Gln	Len	Tvr	Len	Pro	Phe	Val	Glv	Len	Leu	Len	Glu	Asn	He
305		• • • • • • • • • • • • • • • • • • • •	.,,,,,	. , .	310				0.1	315	20.0	200	0.0		320
	Arg	Leu	Ala	Gly		Asp	Thr	Leu	Tyr		Cvs	Ala	Ala	Met	
	J			325		•			330		•			335	
Asn	Ser	Ala	Ser	Arg	Asp	Glu	Phe	Pro	Cys	Gly	Phe	Thr	Ser		Ala
			340					345					350		
Asn	Arg	Gly	Ser	Leu	Ser	Thr	Asp	Lys	Asp	Thr	Ala	Tyr	Gly	Ser	Phe
		355					360					365			
Gln	Asn	G]y	His	Gly	He	Lys	Arg	Glu	Asp	Ser	Arg	G1 y	Ser	Leu	He
	370					375					380				
Pro	Glu	Gly	Ala	Thr	Gly	Phe	Pro	Asp	Gln	Gly	Asn	Thr	Gly	Glu	Asn
385					390					395					400
Thr	۸rg	Gln	Ser	Ser	Thr	Arg	Ser	Ser	Val	Ser	Gln	Tyr	Asn	Arg	Leu

				405					410					415	
Asp	Gln	Tyr	Glu	He	Arg	Ser	Leu	Leu	Met	Cys	Ty.r	Leu	Tyr	He	Val
			420					425					430		
Lys	Met	He	Ser	Glu	Asp	Thr	Leu	Leu	Thr	Tyr	Trp	Asn	Lys	Va]	Ser
		435					440					445			
Pro	Gln	Glu	Leu	11e	Asn	Пе	Leu	He	Leu	Leu	Glu	Val	Cys	Leu	Phe
	450					455					460				
His	Phe	Arg	Tyr	Met	Gly	Lys	Arg	Asn	He	Ala	Arg	Val	His	Asp	Ala
465					470					475					480
Trp	Leu	Ser	Lys	His	Phe	Gly	He	Asp	Arg	Lys	Ser	Gln	Thr	Met	Pro
				485					490					495	
Ala	Leu	Arg	Asn	Arg	Ser	Gly	Val	Met	Gln	Ala	Arg	Leu	Gln	His	Leu
			500					505					510		
Ser	Ser	Leu	Glu	Ser	Ser	Phe	Thr	Leu	Asn	His	Ser	Ser	Thr	Thr	Thr
		515					520					525			
Glu	Ala	Asp	lle	Phe	His	Gln	Ala	Leu	Leu	Glu	Gly	Asn	Thr	Ala	Thr
	530					535					540				
Glu	Val	Ser	Leu	Thr	Val	Leu	Asp	Thr	lle	Ser	Phe	Phe	Thr	Gln	Cys
014							•								-
545					550		·			555					560
545					550		Asn			555					560
545					550					555					560
545 Phe	Lys	Thr	Gln	Leu 565	550 Leu	Asn		Asp	Gly 570	555 His	Asn	Pro	Leu	Met 575	560 Lys
545 Phe	Lys	Thr	Gln	Leu 565	550 Leu	Asn	Asn	Asp	Gly 570	555 His	Asn	Pro	Leu	Met 575	560 Lys
545 Phe Lys	Lys Val	Thr Phe	Gln Asp 580	Leu 565 Ile	550 Leu His	Asn Leu	Asn	Asp Phe 585	61y 570 Leu	555 His Lys	Asn Asn	Pro Gly	Leu Gln 590	Met 575 Ser	560 Lys Glu
545 Phe Lys	Lys Val	Thr Phe	Gln Asp 580	Leu 565 Ile	550 Leu His	Asn Leu	Asn Ala	Asp Phe 585	61y 570 Leu	555 His Lys	Asn Asn	Pro Gly	Leu Gln 590	Met 575 Ser	560 Lys Glu
545 Phe Lys Val	Lys Val Ser	Thr Phe Leu 595	Gln Asp 580 Lys	Leu 565 Ile His	550 Leu His Val	Asn Leu Phe	Asn Ala Ala	Asp Phe 585 Ser	Gly 570 Leu Leu	555 His Lys	Asn Asn Ala	Pro Gly Phe 605	Leu Gln 590 11e	Met 575 Ser Ser	560 Lys Glu Lys
545 Phe Lys Val	Lys Val Ser	Thr Phe Leu 595 Ser	Gln Asp 580 Lys	Leu 565 Ile His	550 Leu His Val	Asn Leu Phe Lys	Asn Ala Ala 600	Asp Phe 585 Ser Arg	Gly 570 Leu Leu Val	555 His Lys	Asn Asn Ala	Pro Gly Phe 605 Cys	Leu Gln 590 11e	Met 575 Ser Ser	560 Lys Glu Lys
545 Phe Lys Val	Lys Val Ser Pro 610	Thr Phe Leu 595 Ser	Gln Asp 580 Lys Ala	Leu 565 Ile His	550 Leu His Val	Asn Leu Phe Lys 615	Asn Ala Ala 600 Gly	Asp Phe 585 Ser Arg	Gly 570 Leu Leu Val	555 His Lys Arg Asn	Asn Asn Ala Met 620	Pro Gly Phe 605 Cys	Leu Gln 590 Ile Ala	Met 575 Ser Ser	560 Lys Glu Lys Phe
545 Phe Lys Val	Lys Val Ser Pro 610	Thr Phe Leu 595 Ser	Gln Asp 580 Lys Ala	Leu 565 Ile His	550 Leu His Val	Asn Leu Phe Lys 615	Asn Ala Ala 600 Gly	Asp Phe 585 Ser Arg	Gly 570 Leu Leu Val	555 His Lys Arg Asn	Asn Asn Ala Met 620	Pro Gly Phe 605 Cys	Leu Gln 590 Ile Ala	Met 575 Ser Ser	560 Lys Glu Lys Phe
545 Phe Lys Val Phe Cys 625	Lys Val Ser Pro 610 Tyr	Thr Phe Leu 595 Ser Glu	Gln Asp 580 Lys Ala	Leu 565 Ile His Phe	550 Leu His Val Phe Lys 630	Asn Leu Phe Lys 615 Cys	Asn Ala Ala 600 Gly	Asp Phe 585 Ser Arg	Gly 570 Leu Leu Val	555 His Lys Arg Asn Lys 635	Asn Ala Met 620	Pro Gly Phe 605 Cys	Leu Gln 590 lle Ala Ser	Met 575 Ser Ser Ala	560 Lys Glu Lys Phe Arg 640
545 Phe Lys Val Phe Cys 625	Lys Val Ser Pro 610 Tyr	Thr Phe Leu 595 Ser Glu	Gln Asp 580 Lys Ala	Leu 565 Ile His Phe	550 Leu His Val Phe Lys 630	Asn Leu Phe Lys 615 Cys	Asn Ala Ala 600 Gly Cys	Asp Phe 585 Ser Arg	Gly 570 Leu Leu Val	555 His Lys Arg Asn Lys 635	Asn Ala Met 620	Pro Gly Phe 605 Cys	Leu Gln 590 lle Ala Ser	Met 575 Ser Ser Ala	560 Lys Glu Lys Phe Arg 640
545 Phe Lys Val Phe Cys 625 Asn	Lys Val Ser Pro 610 Tyr Glu	Thr Phe Leu 595 Ser Glu Ala	Gln Asp 580 Lys Ala Val	Leu 565 Ile His Phe Leu Ala 645	550 Leu His Val Phe Lys 630 Leu	Asn Leu Phe Lys 615 Cys Leu	Asn Ala Ala 600 Gly Cys	Asp Phe 585 Ser Arg Thr	Gly 570 Leu Leu Val Ser Leu 650	555 His Lys Arg Asn Lys 635 Met	Asn Ala Met 620 Ile Arg	Pro Gly Phe 605 Cys Ser	Leu Gln 590 Ile Ala Ser	Met 575 Ser Ser Ala Thr Phe 655	560 Lys Glu Lys Phe Arg 640 Glu
545 Phe Lys Val Phe Cys 625 Asn	Lys Val Ser Pro 610 Tyr Glu	Thr Phe Leu 595 Ser Glu Ala	Gln Asp 580 Lys Ala Val	Leu 565 Ile His Phe Leu Ala 645	550 Leu His Val Phe Lys 630 Leu	Asn Leu Phe Lys 615 Cys Leu	Asn Ala Ala 600 Gly Cys	Asp Phe 585 Ser Arg Thr	Gly 570 Leu Leu Val Ser Leu 650	555 His Lys Arg Asn Lys 635 Met	Asn Ala Met 620 Ile Arg	Pro Gly Phe 605 Cys Ser	Leu Gln 590 Ile Ala Ser	Met 575 Ser Ser Ala Thr Phe 655	560 Lys Glu Lys Phe Arg 640 Glu
545 Phe Lys Val Phe Cys 625 Asn	Lys Val Ser Pro 610 Tyr Glu Thr	Thr Phe Leu 595 Ser Glu Ala Lys	Gln Asp 580 Lys Ala Val Ser Arg 660	Leu 565 Ile His Phe Leu Ala 645 Lys	550 Leu His Val Phe Lys 630 Leu	Asn Leu Phe Lys 615 Cys Leu Phe	Asn Ala Ala 600 Gly Cys	Asp Phe 585 Ser Arg Thr Leu Arg 665	Gly 570 Leu Leu Val Ser Leu 650	555 His Lys Arg Asn Lys 635 Met	Asn Ala Met 620 Ile Arg	Pro Gly Phe 605 Cys Ser Asn Gln	Leu Gln 590 lle Ala Ser Asn Ile 670	Met 575 Ser Ser Ala Thr Phe 655 Ile	560 Lys Glu Lys Phe Arg 640 Glu
545 Phe Lys Val Phe Cys 625 Asn	Lys Val Ser Pro 610 Tyr Glu Thr	Thr Phe Leu 595 Ser Glu Ala Lys	Gln Asp 580 Lys Ala Val Ser Arg 660	Leu 565 Ile His Phe Leu Ala 645 Lys	550 Leu His Val Phe Lys 630 Leu	Asn Leu Phe Lys 615 Cys Leu Phe	Asn Ala Ala 600 Gly Cys Tyr Leu	Asp Phe 585 Ser Arg Thr Leu Arg 665	Gly 570 Leu Leu Val Ser Leu 650	555 His Lys Arg Asn Lys 635 Met	Asn Ala Met 620 Ile Arg	Pro Gly Phe 605 Cys Ser Asn Gln	Leu Gln 590 lle Ala Ser Asn Ile 670	Met 575 Ser Ser Ala Thr Phe 655 Ile	560 Lys Glu Lys Phe Arg 640 Glu

	690					695					700				
Pro	Met	Lys	Ala	Thr	Ala	Phe	Pro	Ala	Glu	Va]	Lys	Asp	Leu	Thr	Lys
705					710					715					720
Arg	lle	Arg	Thr	Val	Leu	Met	Ala	Thr	Ala	Gln	Met	Lys	Glu	His	Glu
				725					730					735	
Lys	Asp	Pro	Glu	Met	Leu	Пе	Asp	Leu	Gln	Tyr	Ser	Leu	Ala	Lys	Ser
			740					745					750		
Tyr	Ala	Ser	Thr	Pro	Glu	Leu	Arg	Lys	Thr	Trp	Leu	Asp	Ser	Met	Ala
		755					760					765			
Lys	He	His	Val	Lys	Asn	Gly	Asp	Phe	Ser	Glu	Ala	Ala	Met	Cys	Tyr
	770					775					780				
Val	His	Val	Ala	Ala	Leu	Val	Ala	61u	Phe	Leu	llis	Arg	Lys	Lys	Leu
785					790					795					800
Phe	Pro	Asn	Gly	Cys	Ser	Ala	Phe	Lys	Lys	11e	Thr	Pro	Asn	Пe	Asp
				805					810					815	
Glu	Glu	Gly	Ala	Met	Lys	Glu	Asp	Ala	Gly	Met	Met	Asp	Val	His	Tyr
			820					825					830		
Ser	Glu	Glu	Val	Leu	Leu	Glu	Leu	Leu	Glu	Gln	Cys	Val	Asp	Gly	Leu
		835					840					845			
Trp	Lys	Ala	Glu	Arg	Tyr	Glu	He	Hle	Ser	Glu	lle	Ser	Lys	Leu	lle
	850					855					860				
Val	Pro	Пe	Tyr	Glu	Lys	Arg	Arg	Glu	Phe	Glu	Lys	Leu	Thr	Gln	Val
865					870					875					880
Tyr	Arg	Thr	Leu	His	Gly	Ala	Tyr	Thr	Lys	He	Leu	Glu	Val	Met	His
				885					890					895	
Thr	Lys	Lys	Arg	Leu	Leu	G1 y	Thr	Phe	Phe	Arg	Val	Ala	Phe	Tyr	Gly
			900					905					910		
Gln	Ser	Phe	Phe	Glu	Glu	Glu	Asp	Gly	Lys	Glu	Tyr	lle	Tyr	Lys	Glu
		915					920					925			
Pro	Lys	Leu	Thr	G1 y	Leu	Ser	Glu	He	Ser	Leu	Arg	Leu	Val	Lys	Leu
	930					935					940				
Tyr	G1 y	Glu	Lys	Phe	Gly	Thr	Glu	Asn	Val	Lys	He	He	Gln	Asp	Ser
945					950					955					960
Asp	Lys	Val	Asn	Ala	Lys	Glu	Leu	Asp	Pro	Lys	Tyr	Ala	His	Пе	Gln
				965					970					975	
Va]	Thr	Tyr	Val	Lys	Pro	Tyr	Phe	Asp	Asp	Lys	Glu	Leu	Thr	Glu	Arg

			980					985					990		
Lys	Thr	Glu	Phe	Glu	Arg	Asn	His	Asn	He	Ser	Arg	Phe	Va]	Phe	Glu
		995				1	000]	005			
Ala	Pro	Tyr	Thr	Leu	Ser	Gly	Lys	Lys	Gln	Gly	Cys	He	Glu	Glu	Gln
ı	010				1	015]	020				
Cys	Lys	Arg	Arg	Thr	He	Leu	Thr	Thr	Ser	Asn	Ser	Phe	Pro	Tyr	Val
1025	5			1	030]	1035				1	1040
Lys	Lys	Arg	He	Pro	lle	Asn	Cys	Glu	G1n	Gln	Ile	Asn	Leu	Lys	Pro
]	045]	050				l	1055	
He	Asp	Val	Ala	Thr	Asp	Glu	He	Lys	Asp	Lys	Thr	Ala	Glu	Leu	Gln
		1	060]	065]	1070		
Lys	Leu	Cys	Ser	Ser	Thr	Asp	Val	Asp	Met	He	Gln	Leu	G]n	Leu	Lys
	j	075]	080]	1085			
Leu	Gln	Gly	Cys	Val	Ser	Val	Gln	Val	Asn	Ala	Gly	Pro	Leu	Ala	Tyr
]	090]	095]	100				
Ala	Arg	Ala	Phe	Leu	Asn	Asp	Ser	Gln	Ala	Ser	Lys	Tyr	Pro	${\tt Pro}$	Lys
1105	5]	1110					1115]	1120
Lys	Val	Ser	Glu	Leu	Lys	Asp	Met	Phe	Arg	Lys	Phe	He	Gln	Ala	Cys
			j	125]	130]	135	
Ser	Пе	Ala	Leu	Glu	Leu	Asn	Glu	Arg	Leu	He	Lys	Glu	Asp	Gln	Val
]	140]	1145					1150		
Glu	Tyr	His	Glu	Gly	Leu	Lys	Ser	Asn	Phe	Arg	Asp	Met	Val	Lys	Glu
]	1155					1160]	1165			
Leu	Ser	Asp	Пe	Пе	His	Glu	Gln	Пе	Leu	Gln	Glu	Asp	Thr	Met	His
]	1170					1175				1	180				
Ser	Pro	Trp	Met	Ser	Λsn	Thr	Leu	His	Val	Phe	Cys	Ala	lle	Ser	Gly
1185	5]	1190					1195]	1200
Thr	Ser	Ser	Asp	Arg	Gly	Tyr	Gly	Ser	Pro	Arg	Tyr	Ala	Glu	Val	
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<211> 267

<212> PRT

<213> Homo sapiens

<400)> 35	545													
Met	His	Tyr	He	Lys	Thr	Trp	Ser	Leu	Leu	Gly	Glu	Met	Ser	Glu	Lys
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Leu	Arg	Arg	Cys	Arg	Lys	Glu	Leu	Thr	Ala	Ala	Tle	Asp	Arg	Ala	Phe
			20					25					30		
Glu	Gly	Val	Ser	Tyr	Ser	Gln	Glu	Cys	Thr	Gly	Gln	Gln	Arg	Leu	Glu
		35					40					45			
Leu	Ser	Ala	Ala	Pro	Leu	Ser	Phe	Ser	Leu	Pro	Val	His	Arg	Leu	Leu
	50					55					60				
Cys	Arg	Arg	His	Pro	Leu	Ala	Ala	Cys	Ser	Ser	Ala	Ala	Pro	Phe	Ala
65					70					75					80
Ala	Val	Pro	Cys	Ala	Pro	Glu	Asn	Glu	Asn	Pro	Ala	Phe	Ala	Thr	Asn
				85					90					95	
His	Ala	Pro	Va]	Asn	Ala	Lys	Pro	His	Ala	Leu	Cys	Pro	Glu	Arg	Lys
			100					105					110		
Pro	Leu		Ser	Lys	Glu	Asn		Leu	Met	His	Ser		lle	Leu	Ala
		115					120					125			
Pro		Arg	Glu	Ser	Trp		Thr	Ala	Gly	Glu		Glu	Asn	Trp	Arg
	130					135					140				
	Glu	Asn	Leu	Arg		Asp	Met	Glu	Arg		Leu	Lys	Ala	Asp	
145		D			150	0	C	C 1	01	155	TO I	,			160
Asn	Met	Pro	Leu		Asn	Ser	Ser	61n		val	Inr	Lys	Asp		Leu
Λ	M - 4	11.	Δ	165	т1	C	11.	Δ	170	11.	C1	C1	1	175	C1
Asp	лет	116		ms	Inr	26L	116		ınr	116	Glu	GIU	Leu	мта	G1 y
Lus	116	Clu	180	Clu	A can	Clu	Lou	185	uic	Mot	Cvc	C1 _w	190 His	Cvc	Cln
Ly5	116	195	rne	Glu	ASII	GIU		ASII			Cys	205	1115	Cys	OTH
Aen	Ser		Phe	Lve	Glu	Glu					Lou		Asp	lve	Sor
изр	210	110	1110	Lys	oru	215	ATG	пр	Mid	LCu	220	MC t	пор	1733	561
Pro		lvs	Ala	Thr	Asp		Asp	Pro	Glv	Ser		Lvs	Gln	Ala	Phe
225	0111	12,50			230				01,	235	Bea	5,0	0111	1110	240
	Asp	His	Asn	He		Glu	Thr	Val	Leu		Leu	Glu	Glu	Asp	
•	•			245					250	•				255	-
Asn	Va1	Met	Thr	Ser	Phe	Lys	Tyr	Gln		Glu					
			260					265							

<210> 3546 <211> 184 <212> PRT <213> Homo sapiens <400> 3546 Met Gly Val Cys Arg Thr Gln Tyr Phe Val Thr Gln Val Leu Ser Leu Val Pro Ile Ser Tyr Phe Ser Trp Ser Ser Pro Phe Ser His Pro Gly 20 25 Thr Lys Phe Trp Thr Gln Leu Lys Phe lle Cys Gln Thr Leu Val Lys 40 Leu Gly Leu Phe Pro Pro Gln Glu Ser Gly Ile Arg Asp Leu Ile Pro 50 55 Gly Ser Val IIe Asp Ala Thr Met Phe Asn Pro Cys Gly Tyr Ser Met 70 75 Asn Gly Met Lys Ser Asp Gly Thr Tyr Trp Thr Ile His Ile Thr Pro 90 85 Glu Pro Glu Phe Ser Tyr Val Ser Phe Glu Thr Asn Leu Ser Gln Thr 100 105 Ser Tyr Asp Asp Leu lle Arg Lys Val Val Glu Val Phe Lys Pro Gly 120 125 Lys Phe Val Thr Thr Leu Phe Val Asn Gln Ser Ser Lys Cys Arg Thr 130 135 140 Val Leu Ala Ser Pro GIn Lys 11e Glu Gly Phe Lys Arg Leu Asp Cys 150 155 Gln Ser Ala Met Phe Asn Asp Tyr Asn Phe Val Phe Thr Ser Phe Ala 165 170 175

<210> 3547
<211> 132

Lys Lys Gln Gln Gln Gln Ser 180

<212> PRT <213> Homo sapiens <400> 3547 Met Met Tyr Val Pro Gln Asn Gln Val IIe Leu Ser Val Leu Phe Gln 5 10 Tyr Phe Phe Val Asn Leu Trp Ser Cys Ala Pro Ile Thr Thr Ile Pro 20 25 Ile Leu Glu Arg Leu Tyr His Phe Leu Phe Pro Ser Pro Ala Leu Cys 35 40 45 Asn His Glu Ser Ala Phe Cys Leu Tyr Gly Phe Ala Phe Phe Arg His 55 Leu Tyr Gln Trp Gln Leu Thr Val His Gly Leu His Ala Trp Leu Leu 70 75 Ser Leu Ser Ile Leu Phe Pro Arg Phe Ile His Val Val Ala Cys Gly 85 90 Ser Ala Ser Phe Leu Ser Val Ala Glu Glu Tyr Ser Ile Val Trp Thr 100 105 Asp Arg Val Leu Ile Ile His Ser Ser Val Asp Gly His Arg Gly Cys 115 120 125 Phe His Leu Pro 130 -<210> 3548 <211> 115 <212> PRT <213> Homo sapiens

<400> 3548

Gln Gly Ala Val Met Asp Pro Ser Gln Gly Pro Leu Ile Pro Arg Ala 55 Ser Leu Ser Leu Gly Ser Ser Ser Gln His Cys Trp Ser Gly Gly Thr 70 75 His Thr His Ile Phe Pro Lys Cys Tyr Gln Cys Tyr Gly Val Ile Arg 85 90 Asn Phe Ile Tyr Leu Phe Phe Ala Asn Met lle Ala lle Lys Leu Pro 105 110 His Leu Tyr 115 <210> 3549 <211> 153 <212> PRT <213> Homo sapiens <400> 3549 Met Ala Ser Pro Asp Pro Pro Ala Thr Ser Tyr Ala Pro Ser Asp Val 10 15 Pro Ser Gly Val Ala Leu Phe Leu Thr Ile Pro Phe Ala Phe Phe Leu 25 Pro Glu Leu lle Phe Gly Phe Leu Val Trp Thr Met Val Ala Ala Thr 35 40 45 His lle Val Tyr Pro Leu Leu Gln Gly Trp Val Met Tyr Val Ser Leu 50 55 Thr Ser Phe Leu Ile Ser Leu Met Phe Leu Leu Ser Tyr Leu Phe Gly 70 75 Phe Tyr Lys Arg Phe Glu Ser Trp Arg Val Leu Asp Ser Leu Tyr His 85 90 Gly Thr Thr Gly 11e Leu Tyr Met Ser Ala Ala Val Leu Gln Val His 105 110 Ala Thr Ile Val Ser Glu Lys Leu Leu Asp Pro Arg Ile Tyr Tyr Ile

120

Asn Ser Ala Ala Ser Phe Phe Ala Phe Ile Ala Thr Leu Leu Tyr Ile

125

115

130 135 140
Leu His Ala Phe Ser Ile Tyr Tyr His
145 150

<210> 3550

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3550

Met Val Cys Asp Phe Thr Pro Leu Cys Leu lle lle Cys Gln Gln Thr
1 5 10 15

Tyr Trp Ala Lys His Lys Trp Leu Arg His Ser Trp Pro 11e Ser Cys 20 25 30

His Arg Cys His Pro Gln Arg Gln Thr Leu Gly Asn Asn Leu Gly Thr 35 40 45

Ala Ser Ser Pro Cys Gln Val Met Ala Ser Ser Ala Ser Gln His Val
50 55 60

Pro Gly Leu Pro Leu Gly Ala Gly Phe Ser Ala Gly Leu Arg Asp Ser 65 70 75 80

Trp Lys Glu Pro Gln Gly Lys Val Arg Arg Ser Ser Trp Tyr Arg Leu 85 90 95

Met Thr Lys Glu Arg Thr Arg Lys Ala Ala Trp Val Trp Trp Lys Phe 100 105 110

Gln Cys Asn Val 11e Pro Ser Arg His 11e Cys Asp Ser Leu Lys 115 120 125

<210> 3551

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3551

Met Phe Thr Glu Tyr Gln Ala Leu Lys Gly Gln Asn His Pro Pro Thr

5 10 15 Gly Pro Ala Leu Gly Pro Gly His Pro Ala Gly Ala Gly Cys Ala Glu 25 Arg His Ala Glu Val Arg Ala Gly Ala Asp Arg Glu Cys Phe Gly Glu 40 45 Ala Pro Leu Tyr Pro Asn Thr Cys Cys Ile Val Cys Val Ser Leu Asn 55 Arg Val Thr Ala Ala Gly Val Val Leu Tyr Arg Glu Pro Cys Pro Arg 70 75 80 Ala Leu Ser Phe Pro Phe Leu His Phe Leu Phe Tyr Ala Gln Phe Ser 85 90 Ser Leu Gly Thr Val Leu Leu Phe Phe Ser Phe Ser Phe Pro His Leu 105 110 lle lle Phe lle Pro 115 <210> 3552 <211> 103 <212> PRT <213> Homo sapiens <400> 3552 Met Ile Cys Tyr Ser Leu Gly Leu Gln Pro Pro Leu Leu Pro Gln His ì 5 10 15 Val Leu Cys Thr Val Ala Ile Leu Ser Ser Phe Gly Ser Ala Pro Ile 20 25 Val Cys Ser Leu Lys Phe Leu Ala Pro Leu Ser Met Ser Ser Val Phe 45 40 Arg Met Pro Phe Ser lle Ser Ser Tyr Leu Cys Pro Ala Thr Leu His 50 55 Leu Thr Ser Pro Leu Phe Lys Leu Phe 11e Ser Pro Phe Leu Thr Leu 70 75 Leu Gly Phe Ser Leu Arg Pro Lys Ser Phe Leu Gln Val Leu Pro Lys

90

95

85

Pro Pro Lys Ser Gln Leu Ile

100

<210> 3553 <211> 153 <212> PRT <213> Homo sapiens <400> 3553 Met Pro Ser Ser Val Ala Gly Glu Thr Ser Val Leu Ala Val Pro Ser 1 5 10 Trp Arg Asp His Ser Val Glu Pro Leu Arg Asp Pro Asn Pro Ser Asp 20 25 Leu Leu Glu Asn Leu Asp Asp Ser Val Phe Ser Lys Arg His Ala Lys 35 40 45 Leu Glu Leu Asp Glu Lys Arg Arg Lys Arg Trp Asp Ile Gln Arg Ile 55 Arg Glu Gln Arg Ile Leu Gln Arg Leu Gln Leu Arg Met Tyr Lys Lys 65 70 75 Lys Gly Ile Gln Glu Ser Glu Pro Glu Val Thr Ser Phe Pro Glu 85 90 Pro Asp Asp Val Glu Ser Leu Met lle Thr Pro Phe Leu Pro Val Val 100 105 Ala Phe Gly Arg Pro Leu Pro Lys Leu Thr Pro Gln Asn Phe Glu Leu 115 120 125 Pro Trp Leu Asp Glu Arg Ser Arg Cys Arg Leu Glu Ile Gln Lys Lys

135

Gln Thr Pro His Arg Thr Cys Arg Lys

150

140

<210> 3554

145

<211> 1099

<212> PRT

<213> Homo sapiens

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Ser	Arg	Val	Glu	Thr	Asn	Glu	Arg	Ala	Asn	Glu	Cys	Ser	His	Ser	Lys
			20			•		25					30		
Asn	lle	Gln	Asn	Phe	Pro	Ser	Asp	Leu	He	Glu	Asn	Pro	lle	Met	Lys
		35					40					45			
Ser	Lys	Met	Ser	Lys	Phe	Tyr	Gly	Val	Asn	Glu	Thr	Glu	Asn	Glu	Asp
	50					55					60				
Asn	Thr	Asn	Arg	Asp	Ser	Pro	Пe	Phe	Asp	Tyr	Ser	Pro	Arg	Leu	Ser
65					70					75					80
Ala	Leu	Leu	Ser	llis	Asp	Lys	Leu	Met	His	Ser	Gln	Gly	Ser	Phe	Asr
				85					90					95	
Asp	Thr	His	Thr	Pro	Glu	Ser	Asn	Gly	Asn	Lys	Cys	Glu	Ala	Pro	Λla
			100					105					110		
Leu	Ser	Phe	Ser	Asp	Lys	Thr	Met	Leu	Ser	Gly	Gln	Arg	He	Gly	Glu
		115					120					125			
Lys	Phe	Gln	Asp	Gln	Phe	Leu	Gly	lle	Ala	Ala	He	Asn	He	Ser	Leu
	130					135					140				
Pro	Gly	Glu	Gln	Tyr	Gly	Gln	Lys	Ser	Leu	Asn	Met	lle	Ser	Ser	Asr
145					150					155					160
Pro	Gln	Val	Gln	Tyr	His	Asn	Asp	Lys	Tyr	lle	Ser	Asn	Thr	Ser	Gly
				165					170					175	
Glu	Asp	Glu	Lys	Thr	His	Pro	Gly	Phe	Gln	Gln	Met	Pro	G] u	Asp	Lys
			180					185					190		
Glu	Asp	Glu	Ser	Glu	lle	Glu	Glu	Tyr	Ser	Cys	Ala	Val	Thr	Pro	Gly
		195					200					205			
G1 y	Asp	Thr	Asp	Asn	Ala	He	Val	Ser	Leu	Thr	Cys	Ala	Thr	Pro	Leu
	210					215					220				
Leu	Asp	Glu	Thr	He		Ala	Ser	Asp	Tyr		Thr	Ser	Leu	Leu	Asr
225					230					235					240
Asp	Gln	Gln	Asn		Thr	Gly	Thr	Asp		Asp	Ser	Asp	Asp		Ph€
				245					250					255	
Tyr	Asp	Thr		Leu	Phe	Glu	Asp		Asp	His	Asp	Ser	Leu	Leu	Leu
	0.3		260			0		265		a .		m	270		
Acr	6 1 1 1 1	Acr	A	A 100	1000	1 110	1 0	Uic	Unc	1 1 1 1 1	A	1 22.20	A	1 10 10	10.

		275					280					285			
Gln	Glu	Glu	Asn	Asp	Glu	Thr	Лlа	Ser	Pro	Ala	Asp	Val	Phe	Tyr	Asp
	290					295					300				
Val	Ser	Lys	Glu	Asn	Glu	Asn	Ser	Met	Val	Pro	Gln	Gly	Ala	Pro	Val
305					310					315					320
Gly	Ser	Leu	Ser	Val	Lys	Asn	Lys	Ala	His	Cys	Leu	Gln	Asp	Phe	Leu
				325					330					335	
Met	Asp	Val	Glu	Lys	Asp	Glu	Leu	Asp	Ser	G1 y	Glu	Lys	He	His	Leu
			340					345					350		
Asn	Pro	Val	Gly	Ser	Asp	Lys	Val	Asn	Gly	Gln	Ser	Leu	Glu	Thr	Gly
		355					360					365			
Ser	Glu	Arg	Glu	Cys	Thr	Asn	He	Leu	Glu	G1 y	Asp	G1u	Ser	Asp	Ser
	370					375					380				
Leu	Thr	Asp	Tyr	Asp	lle	Val	Gly	Gly	Lys	Glu	Ser	Phe	Thr	Ala	Ser
385					390					395					400
Leu	Lys	Phe	Asp	Asp	Ser	Gly	Ser	Trp	Arg	Gly	Arg	Lys	Glu	Glu	Tyr
				405					410					415	
Val	Thr	Gly	Gln	Glu	Phe	His	Ser	Asp	Thr	Asp	His	Leu	Asp	Ser	Met
			420					425					430		
Gln	Ser	Glu	Glu	Ser	Tyr	Gly	Asp	Tyr	lle	Tyr	Asp	Ser	Asn	Asp	Gln
		435					440					445			
Asp	Asp	Asp	Asp	Asp	Asp	Gly	He	Asp	Glu	Glu	G1 y	Gly	G1 y	He	Arg
	450					455					460				
Asp	Glu	Asn	Gly	Lys	Pro	Arg	Cys	Gln	Asn	Val	Ala	Glu	Asp	Met	Asp
465					470					475					480
lle	Gln	Leu	Cys	Ala	Ser	lle	Leu	Asn	Glu	Asn	Ser	Asp	Glu	Asn	Glu
				485										495	
Asn	He	Asn		Met	lle	Leu	Leu		Lys	Val	His	Ser		Ser	Ser
			500					505					510		
Leu	G1u		Gln	GIn	Arg	Val		Val	Val	GIn	Leu		Ser	Pro	Ser
0.3		515	,		mı	0.1	520					525			an.
Glu		Asn	Leu	Val	Thr		Lys	Ser	Asn	Leu		Glu	lyr	Thr	Ihr
a.1	530		0.1			535					540		0.1		
	11e	Λla	Gly	Lys		Lys	Glu	Asn	Leu		Asn	HIS	61u	Met	
545			V 3		550 B	Б	7.7	T. 1		555	T)	0.1	C	6.1	560
Leu	Lys	Asp	val	Leu	ro	Pro	11e	11e	Lys	Asp	Ihr	ыu	Ser	Glu	Lys

				565					570					575	
Thr	Phe	Gly	Pro	Ala	Ser	He	Ser	His	Asp	Asn	Asn	Asn	Пе	Ser	Ser
			580					585					590		
Thr	Ser	Glu	Leu	Gly	Thr	Asp	Leu	Ala	Asn	Thr	Lys	Val	Lys	Leu	He
		595					600					605			
Gln	Gly	Ser	Glu	Leu	Pro	Glu	Leu	Thr	Asp	Ser	Val	Lys	Gly	Lys	Asp
	610					615					620				
Glu	Tyr	Phe	Lys	Asn	Met	Thr	Pro	Lys	Val	Asp	Ser	Ser	Leu	Asp	His
625					630					635					640
Ile	Ile	Cys	Thr	Glu	Pro	Asp	Leu	lle	Gly	Lys	Pro	Ala	Glu	Glu	Ser
				645					650					655	
His	Leu	Ser	Leu	lle	Ala	Ser	Val	Thr	Asp	Lys	Asp	Pro	Gln	Gly	Asn
			660					665					670		
Gly	Ser	Asp	Leu	11e	Lys	Gly	Arg	Asp	Gly	Lys	Ser	Asp	Пе	Leu	He
		675					680					685			
Glu	Asp	Glu	Thr	Ser	lle	Gln	Lys	Met	Tyr	Leu	Gly	Glu	Gly	Glu	Val
	690					695					700				
Leu	Val	Glu	Gly	Leu	Val	Glu	Glu	Glu	Asn	Arg	His	Leu	Lys	Leu	Leu
705					710					715					720
Pro	Gly	Lys	Asn	Thr	Arg	Asp	Ser	Phe	Lys	Leu	lle	Asn	Ser	Gln	Phe
				725					730					735	
Pro	Phe	Pro	Gln	lle	Thr	Asn	Asn	Glu	Glu	Leu	Asn	Gln	Lys	Gly	Ser
•			740					745					750		
Leu	Lys	Lys	Ala	Thr	Val	Thr	Leu	Lys	Asp	Glu	Pro	Asn	Asn	Leu	Gln
		755					760					765			
He	lle	Val	Ser	Lys	Ser	Pro	Val	Gln	Phe	Glu	Asn	Leu	Glu	Glu	lle
	770					775					780				
Phe	Asp	Thr	Ser	Val	Ser	Lys	Glu	lle	Ser	Asp	Asp	He	Thr	Ser	Asp
785					790					795					800
He	Thr	Ser	Trp	Glu	Gly	Asn	Thr	His	Phe	Glu	Glu	Ser	Phe	Thr	Asp
				805					810					815	
Gly	Pro	Glu	Lys	Glu	Leu	Asp	Leu	Phe	Thr	Tyr	Leu	Lys	His	Cys	Ala
			820					825					830		
Lys	Asn	He	Lys	Ala	Lys	Asp	Val	Ala	Lys	Pro	Asn	Glu	Asp	Val	Pro
		835					840					845			
Sa.	IJ; c	Val	Lau	Πla	Thr	A1.	Dro	Dage	Ma+	Lvc	C1v	Hic	Low	C1c	1

	850					855					860				
Gly	Val	Asn	Asn	Thr	Lys	Glu	Lys	Ser	Thr	Ser	Thr	Gln	Lys	Asp	Ser
865					870					875					880
Pro	Leu	Asn	Asp	Met	He	Gln	Ser	Asn	Asp	Leu	Cys	Ser	Lys	Glu	Ser
				885					890					895	
Пе	Ser	Gly	Gly	Gly	Thr	Glu	11e	Ser	Gln	Phe	Thr	Pro	Glu	Ser	He
			900					905					910		
Glu	Ala	Thr	Leu	Ser	11e	Leu	Ser	Arg	Lys	His	Val	Glu	Asp	Val	Gly
		915					920					925			
Lys	Asn	Asp	Phe	Leu	Gln	Ser	Glu	Arg	Cys	Ala	Asn	Gly	Leu	Gly	Asn
	930					935					940				
Asp	Asn	Ser	Ser	Asn	Thr	Leu	Asn	Thr	Asp	Tyr	Ser	Phe	Leu	Glu	lle
945					950					955					960
Asn	Asn	Lys	Lys	Glu	Arg	11e	Glu	Gln	Gln	Leu	Pro	Lys	Glu	Gln	Ala
				965					970					975	
Leu	Ser	Pro	Arg	Ser	Gln	Glu	Lys	Glu	Val	Gln	lle	Pro	Glu	Leu	Ser
			980					985					990		
Gln	Val	Phe	Val	Glu	Asp	Val	Lys	Asp	Ile	Leu	Lys	Ser	Arg	Leu	Lys
		995					1000					1005			
Glu	Gly	His	Met	Lys	Pro	Gln	Glu	Val	Glu	Glu	Pro	Ser	Ala	Cys	Ala
1	1010					1015					1020				
Asp	Thr	Lys	He	Leu	He	Gln	Asn	Leu	He	Lys	Arg	He	Thr	Thr	Ser
1025	5]	1030					1035]	1040
Gln	Leu	Val	Asn	Glu	Ala	Ser	Thr	Val	Pro	Ser	Asp	Ser	Gln	Met	Ser
]	1045					1050					1055	
Asp	Ser	Ser	Gly	Val	Ser	Pro	Met	Thr	Asn	Ser	Ser	Glu	Leu	Lys	Pro
		-	1060					1065					1070		
Glu	Ser	Arg	Asp	Asp	Pro	Phe	Cys	He	Gly	Asn	Leu	Lys	Ser	Glu	Leu
		1075					1080					1085			
Leu	Leu	Asn	He	Leu	Lys	Gln	Asp	Gln	His	Ser					
]	090				-	1095									

<211> 265

<212> PRT

<213> Homo sapiens

<400)> 35	555													
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Ser	Gly	Pro	Gly	Tyr	Ser	His	Ala	Gly	Pro	Ala	Ser	Gln	G1 y	Val	Pro
			20					25					30		
Met	Gln	Gly	Gln	Gly	Thr	lle	Gly	Asn	Tyr	Val	Ser	Arg	Thr	Asn	lle
		35					40					45			
Asn	Met	Gln	Ser	Asn	Pro	Val	Ser	Met	Met	Gln	Gln	Gln	Ala	Ala	Thr
	50					55					60				
Ser	His	Tyr	Ser	Ser	Ala	Gln	Gly	Gly	Ser	Gln	His	Tyr	Gln	Gly	Gln
65					70					75					80
Ser	Ser	He	Ala	Met	Met	Gly	Gln	Gly	Ser	Gln	Gly	Ser	Ser	Met	Met
				85					90					95	
Gly	Gln	Arg	Pro	Met	Ala	Pro	Tyr	Arg	Pro	Ser	Gln	Gln	Gly	Ser	Ser
			100					105					110		
Gln	Gln	Tyr	Leu	Gly	Gln	Glu	Glu	Tyr	Tyr	Gly	Glu	Gln	Tyr	Ser	His
		115					120					125			
Ser	Gln	Gly	Ala	Ala	Glu	Pro	Met	Gly	Gln	Gln	Tyr	Tyr	Pro	Asp	Gly
	130					135					140				
His	Gly	Λsp	Tyr	Ala	Tyr	Gln,	Gln	Ser	Ser	Tyr	Thr	Glu	Gln	Ser	Tyr
145					150					155					160
Asp	Arg	Ser	Phe	Glu	Glu	Ser	Thr	Gln	His	Tyr	Tyr	Glu	Gly	Gly	Asn
				165					170					175	
Ser	Gln	Tyr	Ser	Gln	Gln	Gln	Ala	Gly	Tyr	Gln	Gln	Gly	Ala	Ala	Gln
			180					185					190		
Gln	Gln	Thr	Tyr	Ser	G1n	Gln	Gln	Tyr	Pro	Ser	Gln	Gln	Ser	Tyr	Pro
		195					200					205			
Gly		Gln	Gln	Gly	Tyr		Ser	Ala	Gln	Gly		Pro	Ser	Gln	Tyr
	210					215					220				
	Gly	Tyr	Gln	Gln		Gln	G1 y	Gln	Gln		Gly	Ser	Tyr	Arg	
225					230					235					240
Pro	Gln	Thr	Ala		Ser	Ala	Gln	Gln		Arg	Pro	Tyr	Gly		Glu
				245					250					255	
G1n	Gly	Gln	Tyr	Gly	Asn	Tyr	Gln	Gln							

260 265

<210> 3556

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3556

Met Phe Ser Tyr Glu Lys Tyr Thr Leu Phe Ile Leu Ser Ser Ser Phe 15 1

10 5

Phe Phe Phe Phe Arg Trp Ser Leu Ala Leu Val Thr Gln Ala Gly Val 25

Gln Trp Arg Asn Leu Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys 45 40

Arg Phe Ser Cys Ser Ser Leu Pro Tyr Ser Trp Asp Tyr Arg Cys Leu 55 60

Pro Pro Cys Pro Ala Asn Phe Cys Val Phe Ser Arg Asp Gly Val Ser 75 70

Pro His Arg Pro Gly Ser Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro 85 90

Thr Leu Ala Ser Leu Asn Thr Gly 11e Thr Gly Val Ser His Cys 11e 105

Arg Pro His Phe Val Phe Phe Asn Ser Val Ile Gly Ile Ser Phe Phe 125 115 120

Phe Phe Phe Asn Val

130

<210> 3557

<211> 309

<212> PRT

<213> Homo sapiens

<400> 3557

Met Ser Ser Cys Gln Gly Ser Leu His Gly Pro Arg Arg Pro Gln Pro

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Gly	Ala	Ser	Gly	Arg	Ser	Thr	His	Thr	Asp	Gly	Gly	Gly	Ser	Ser	Pro
			20					25					30		
Ala	Gly	Glu	Gln	Glu	Pro	Ser	Gln	His	۸rg	Thr	Gly	Ala	Ala	Val	Gln
		35					40					45			
Arg	Lys	Pro	Trp	Pro	Ser	Gly	G] y	Leu	Trp	Arg	Gln	Asp	Gln	Gln	Pro
	50					55					60				
Gly	Pro	Gly	Glu	Ala	Pro	His	Thr	Gln	Ala	Phe	Gly	Glu	Trp	Pro	Trp
65					70					75					80
Gly	Gln	Glu	Leu	Gly	Ser	Arg	Ala	Pro	Gly	Leu	Gly	Gly	Asp	Ala	Gly
				85					90					95	
Ser	Pro	Ala	Pro	Pro	Phe	His	Ser	Ser	Ser	Tyr	Arg	11e	Ser	Leu	Ala
			100					105					110		
Gly	Val	Glu	Pro	Ser	Leu	Val	Gln	Ala	Ala	Leu	G1 y	Gln	Leu	Val	Arg
		115					120					125			
Leu	Ser	Cys	Ser	Asp	Asp	Thr	Ala	Pro	Glu	Ser	Gln	Ala	Ala	Trp	Gln
	130					135					140				
Lys	Asp	Gly	Gln	Pro	Ile	Ser	Ser	Asp	Arg	His	Arg	Leu	Gln	Phe	Asp
145					150					155					160
Gly	Ser	Leu	lle	Ile	His	Pro	Leu	Gln	Ala	Glu	Asp	Ala	Gly	Thr	Tyr
				165					170					175	
Ser	Cys	Gly	Ser	Thr	Arg	Pro	Gly	Arg	Asp	Ser	Gln	Lys	He	Gln	Leu
			180					185					190		
Arg	He	He	Gly	Gly	Asp	Met	Ala	Val	Leu	Ser	Glu	Ala	Glu	Leu	Ser
		195					200					205			
Arg	Phe	Pro	Gln	Pro	Arg	Λsp	Pro	Ala	Gln	Asp	Phe	Gly	Gln	Ala	Gly
	210					215					220				
Ala	Ala	Gly	Pro	Leu	Gly	Ala	Ile	Pro	Ser	Ser	His	Pro	Gln	Pro	Ala
225					230					235					240
Asn	Arg	Leu	Arg	Leu	Asp	Gln	Asn	Gln	Pro	Arg	Val	Val	Asp	Ala	Ser
				245					250					255	
Pro	Gly	Gln	Arg	11e	Arg	Met	Thr	Cys	Arg	Ala	Glu	Gly	Phe	Pro	Pro
			260					265					270		
Pro	Ala	11e	Glu	Trp	Gln	Arg	Asp	Gly	Gln	Pro	Val	Ser	Ser	Pro	Ser
		275					280					285			
Thr	His	Arg	Pro	Ala	Gln	Gly	Pro	Trp	Gln	Gly	Leu	Arg	۸rg	Pro	Λla

Arg Ala Gly Gln Leu <210> 3558 <211> 784 <212> PRT <213> Homo sapiens <400> 3558 Met Pro His Thr Leu Trp Met Val Trp Val Leu Gly Val Ile 11e Ser Leu Ser Lys Glu Glu Ser Ser Asn Gln Ala Ser Leu Ser Cys Asp Arg Asn Gly 11e Cys Lys Gly Ser Ser Gly Ser Leu Asn Ser Thr Pro Ser Gly Leu Thr Glu Ala Val Lys Ser Leu Asp Leu Ser Asn Asn Arg Ile Thr Tyr 11e Ser Asn Ser Asp Leu Gln Arg Cys Val Asn Leu Gln Ala Leu Val Leu Thr Ser Asn Gly He Asn Thr He Glu Glu Asp Ser Phe Ser Ser Leu Gly Ser Leu Glu His Leu Asp Leu Ser Tyr Asn Tyr Leu Ser Asn Leu Ser Ser Ser Trp Phe Lys Pro Leu Ser Ser Leu Thr Phe Leu Asn Leu Leu Gly Asn Pro Tyr Lys Thr Leu Gly Glu Thr Ser Leu Phe Ser His Leu Thr Lys Leu Gln 11e Leu Arg Val Gly Asn Met Asp Thr Phe Thr Lys Ile Gln Arg Lys Asp Phe Ala Gly Leu Thr Phe Leu Glu Glu Leu Glu Ile Asp Ala Ser Asp Leu Gln Ser Tyr Glu Pro Lys

Ser Leu Lys Ser Ile Gln Asn Val Ser His Leu Ile Leu His Met Lys

		195					200					205			
Gln	His	He	Leu	Leu	Leu	Glu	lle	Phe	Val	Asp	Val	Thr	Ser	Ser	Val
	210					215					220				
Glu	Cys	Leu	Glu	Leu	Arg	Asp	Thr	Asp	Leu	Asp	Thr	Phe	His	Phe	Ser
225					230					235					240
Glu	Leu	Ser	Thr	Gly	Glu	Thr	Asn	Ser	Leu	lle	Lys	Lys	Phe	Thr	Phe
				245					250					255	
Arg	Asn	Val	Lys	lle	Thr	Asp	Glu	Ser	Leu	Phe	Gln	Val	Met	Lys	Leu
			260					265					270		
Leu	Asn	Gln	lle	Ser	Gly	Leu	Leu	Glu	Leu	Glu	Phe	Asp	Asp	Cys	Thr
		275					280					285			
Leu	Asn	Gly	Val	Gly	Asn	Phe	Arg	Ala	Ser	Asp	Asn	Asp	Arg	Val	He
	290					295					300				
Asp	Pro	Gly	Lys	Val	Glu	Thr	Leu	Thr	lle	Arg	Arg	Leu	His	lle	Pro
305					310					315					320
Arg	Phe	Tyr	Leu	Phe	Tyr	Asp	Leu	Ser	Thr	Leu	Tyr	Ser	Leu	Thr	Glu
				325					330					335	
Arg	Val	Lys	Arg	He	Thr	Val	Glu	Asn	Ser	Lys	Val	Phe	Leu	Val	Pro
			340					345					350		
Cys	Leu	Leu	Ser	Gln	His	Leu	Lys	Ser	Leu	Glu	Tyr	Leu	Asp	Leu	Ser
		355					360					365			
Glu	Asn	Leu	Met	Val	Glu	Glu	Tyr	Leu	Lys	Asn	Ser	Ala	Cys	Glu	Asp
	370					375					380				
Ala	Trp	Pro	Ser	Leu		Thr	Leu	Пe	Leu		Gln	Asn	His	Leu	Ala
385					390					395					400
Ser	Leu	Glu	Lys	Thr	Gly	Glu	Thr	Leu	Leu	Thr	Leu	Lys	Asn	Leu	Thr
				405					410			_		415	_
Asn	He	Asp		Ser	Lys	Asn	Ser		His	Ser	Met	Pro	Glu	Thr	Cys
			420				-	425			_	_	430		
Gln	Trp		Glu	Lys	Met	Lys		Leu	Asn	Leu	Ser		Thr	Arg	He
		435			0	2.1	440		m	,	6.7	445			
His		Val	Hhr	Gly	Cys ·		Pro	Lys	Thr	Leu		He	Leu	Asp	Val
C	450	,		,		455	DI	C	,		460	10	C.		,
	Asn	Asn	Asn	Leu		Leu	Pne	Ser	Leu		Leu	Pro	GIn	Leu	
465	,	т.	1.1	C	470	Δ	1		W .	475	,	D.	Δ	A 1	480
0.111	1 (2)11	LVY	110	Sor	Arg	ASD	IVC	Len	MOT	inr	1.60	rro	Asn	A I 2	Ser

				485					490					495	
Leu	Leu	Pro	Met	Leu	Leu	Val	Leu	Lys	Hle	Ser	Arg	Asn	Ala	He	Thr
			500					505					510		
Thr	Phe	Ser	Lys	Glu	Gln	Leu	Asp	Ser	Phe	His	Thr	Leu	Lys	Thr	Leu
		515					520					525			
Glu	Ala	Gly	Gly	Asn	Asn	Phe	He	Cys	Ser	Cys	Glu	Phe	Leu	Ser	Phe
	530					535					540				
Thr	Gln	Glu	Gln	Gln	Ala	Leu	Ala	Lys	Val	Leu	lle	Asp	Trp	Pro	Ala
545					550					555					560
Asn	Tyr	Leu	Cys	Asp	Ser	Pro	Ser	His	Val	Arg	Gly	Gln	Gln	Val	Gln
				565					570					575	
Asp	Val	Arg	Leu	Ser	Val	Ser	Glu	Cys	His	Arg	Thr	Ala	Leu	Val	Ser
			580					585					590		
Gly	Met	Cys	Cys	Ala	Leu	Phe	Leu	Leu	He	Leu	Leu	Thr	Gly	Va]	Leu
		595					600					605			
Cys	His	Arg	Phe	His	Gly	Leu	Trp	Tyr	Met	Lys	Met	Met	Trp	Ala	Trp
	610					615					620				
Leu	Gln	Ala	Lys	Arg	Lys	Pro	Arg	Lys	Ala	Pro	Ser	Arg	Asn	Πle	Cys
625					630					635					640
Tyr	Asp	Ala	Phe	Val	Ser	Tyr	Ser	Glu	Arg	Asp	Ala	Tyr	Trp	Val	Glu
				645					650					655	
Asn	Leu	Met	Val	G1n	Glu	Leu	Glu	Asn	Phe	Asn	Pro	Pro	Phe	Lys	Leu
			660					665					670		
Cys	Leu		Lys	Arg	Asp	Phe	He	Pro	G1 y	Lys	Trp		He	Asp	Asn
		675					680					685			
lle		Asp	Ser	He	Glu		Ser	His	Lys	Thr	Val	Phe	Val	Leu	Ser
	690					695					700				
	Asn	Phe	Val	Lys		Glu	Trp	Cys	Lys		Glu	Leu	Asp	Phe	
705					710					715					720
His	Phe	Arg	Leu	Phe	Asp	Glu	Asn	Asn		Ala	Ala	lle	Leu		Leu
				725					730				_	735	
Leu	Glu	Pro		G]u	Lys	Lys	Ala		Pro	Gln	Arg	Phe		Lys	Leu
			740		/D1	•	m1	745		0.1	a.	Б	750		0.7
Arg	Lys		Met	Asn	Thr	Lys		lyr	Leu	G] u	Trp		Met	Asp	Glu
4.3	6.3	755	63	0.3	DI	T	760		,			765			
410	f. fr	ATCC	1.111	G1v	Pho	1 1212	1/ -	Acr	Lan	Arct	410	010	110	I VC	\0.1º

770 775 780

<210> 3559

<211> 289

<212> PRT

<213> Homo sapiens

<400> 3559

Met Lys Asp Arg Leu Glu Gln Leu Lys Ala Lys Gln Leu Thr Gln Asp

1 5 10 15

Asp Asp Thr Asp Ala Val Glu 11e Ala 11e Asp Asn Thr Ala Phe Met
20 25 30

Asp Glu Phe Phe Ser Glu lle Glu Glu Thr Arg Leu Asn lle Asp Lys 35 40 45

lle Ser Glu His Val Glu Glu Ala Lys Lys Leu Tyr Ser lle Ile Leu 50 55 60

Ser Ala Pro Ile Pro Glu Pro Lys Thr Lys Asp Asp Leu Glu Gln Leu 65 70 75 80

Thr Thr Glu Ile Lys Lys Arg Ala Asn Asn Val Arg Asn Lys Leu Lys 85 90 95

Ser Met Glu Lys His lle Glu Glu Asp Glu Val Arg Ser Ser Ala Asp 100 105 110

Leu Arg 11e Arg Lys Ser Gln His Ser Val Leu Ser Arg Lys Phe Val 115 120 125

Glu Val Met Thr Lys Tyr Asn Glu Ala Gln Val Asp Phe Arg Glu Arg 130 135 140

Ser Lys Gly Arg Ile Gln Arg Gln Leu Glu Ile Thr Gly Lys Lys Thr 145 150 155 160

Thr Asp Glu Glu Leu Glu Glu Met Leu Glu Ser Gly Asn Pro Ala Ile 165 170 175

Phe Thr Ser Gly IIe 11e Asp Ser Gln IIe Ser Lys Gln Ala Leu Ser 180 185 190

Glu lle Glu Gly Arg His Lys Asp lle Val Arg Leu Glu Ser Ser lle 195 200 205

Lys Glu Leu His Asp Met Phe Met Asp Ile Ala Met Leu Val Glu Asn

Gln Gly Glu Met Leu Asp Asn Ile Glu Leu Asn Val Met His Thr Val Asp His Val Glu Lys Ala Arg Asp Glu Thr Lys Lys Ala Val Lys Tyr Gln Ser Gln Ala Arg Lys Leu Ile Ile Ile Ile Val Leu Val Val Val Leu Leu Gly Ile Leu Ala Leu lle Ile Gly Leu Ser Val Gly Leu Asn <210> 3560 <211> 143 <212> PRT <213> Homo sapiens <400> 3560 Met Ser 11e Tyr Leu Cys Thr Tyr Met Ala Tyr Phe Ser Thr Gly 11e Gln Tyr Ile Ile Val Ala Ser Gly Leu Ser Glu Ala Ser Phe Thr His Ser 11e Ser Pro Leu Phe Tyr Lys Gln Ser Lys Pro Thr Leu Phe Lys Asn Phe Leu Leu Leu Leu Leu Leu Leu Leu Gly Arg Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ala Val Ser Ala His Cys Lys Leu His Phe Pro Gly Ser Arg His Phe Pro Ala Ser Ala Ser Gln Ala Ala Gly Thr Ala Gly Ala Arg His His Ala Arg Leu Ile Phe Cys Ile Phe Gly Gly Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser Gln Ser Pro Asp

Leu Val Ile Trp Ser Arg Ser Pro Asp Leu Met Ile Cys Leu Pro 130 135 140

<210> 3561

<211> 1229

<212> PRT

<213> Homo sapiens

<400> 3561

Met Met Leu Asn Gly Ala Asp Ala Val His Phe Arg Val Leu Met Lys 1 5 10 15

Leu Phe lle Lys Val His Leu Glu Asp Val Phe Gln Leu Phe Lys Phe
20 25 30

Cys Ser Val Leu Trp Thr Tyr Gly Ser Ser Leu Ser Asn Pro Leu Asn 35 40 45

Cys Ser Val Lys Thr Val Leu Gln Thr Gln Ala Leu Tyr Val Gly Cys
50 55 60

Ala Met Leu Ser Ser Gln Lys Thr Gln Cys Lys His Gln Leu Ala Ser 65 70 75 80

Ile Ser Ser Pro Val Val Thr Ser Leu Leu Ile Asn Leu Gly Ser Pro
85 90 95

Val Lys Glu Val Arg Arg Ala Ala Ile Gln Cys Leu Gln Ala Leu Ser 100 105 110

Gly Val Ala Ser Pro Phe Tyr Leu Ile Ile Asp His Leu Ile Ser Lys 115 120 125

Ala Glu Glu Ile Thr Ser Asp Ala Ala Tyr Val lle Gln Asp Leu Ala 130 135 140

Thr Leu Phe Glu Glu Leu Gln Arg Glu Lys Lys Leu Lys Ser His Gln 145 150 155 160

Lys Leu Ser Glu Thr Leu Lys Asn Leu Leu Ser Cys Val Tyr Ser Cys
165 170 175

Pro Ser Tyr Ile Ala Lys Asp Leu Met Lys Val Leu Gln Gly Val Asn 180 185 190

Gly Glu IIe Thr Lys Pro Phe Phe Ala Ala IIe Ser Asp Glu Lys Val 195 200 205

Gln	Gln 210	Lys	Leu	Leu	Arg	Met 215	Leu	Phe	Asp	Leu	Leu 220	Val	Asn	Cys	Lys
Asn		Hie	Cvs	Ala	Gln	Thr	Val	Ser	Ser	Val	Phe	lvs	Glv	He	Ser
225	501	1113	Cys	1110	230	11/1	, (1)	00,	501	235	1110	15,5	Oly	110	240
Val	Asn	Ala	G]u	Gln	Val	Arg	11e	Glu	Leu	Glu	Pro	Pro	Asp	Lys	Ala
				245					250					255	
Lys	Pro	Leu	Gly	Thr	Val	G1n	Gln	Lys	Arg	Arg	Gln	Lys	Met	Gln	Gln
			260					265					270		
Lys	Lys	Ser	Gln	Asp	Leu	Glu	Ser	Val	Gln	$\hbox{\rm Gl} u$	Val	Gly	Gly	Ser	Tyr
		275					280					285			
Trp	Gln	Arg	Val	Thr	Leu	He	Leu	Glu	Leu	Leu	Gln	His	Lys	Lys	Lys
	290					295					300				
Leu	Arg	Ser	Pro	Gln	11e	Leu	Val	Pro	Thr	Leu	Phe	Asn	Leu	Leu	Ser
305					310					315					320
Arg	Cys	Leu	Glu	Pro	Leu	Pro	Gln	G1u	Gln	G1 y	Asn	Met	Glu	Tyr	Thr
				325					330					335	
Lys	Gln	Leu	Ile	Leu	Ser	Cys	Leu	Leu	Asn	lle	Cys	Gln	Lys	Leu	Ser
			340					345					350		
Pro	Asp	Gly	Gly	Lys	Ile	Pro	Lys	Asp	lle	Leu	Asp	Glu	Glu	Lys	Phe
		355					360					365			
Asn	Val	Glu	Leu	He	Val	Gln	Cys	He	Arg	Leu	Ser	Glu	Met	Pro	Gln
	370					375					380				
Thr	His	His	His	Ala	Leu	Leu	Leu	Leu	Gly	Thr	Val	Ala	Gly	11e	Phe
385					390					395					400
Pro	Asp	Lys	Val	Leu	His	Asn	11e	Met	Ser	lle	Phe	Thr	Phe	Met	Gly
				405					410					415	
Ala	Asn	Val	Met	Arg	Leu	Asp	Asp	Thr	Tyr	Ser	Phe	Gln	Val	He	Asn
			420					425					430		
Lys	Thr	Val	Lys	Met	Val	lle	Pro	Ala	Leu	Пe	Gln	Ser	Asp	Ser	Gly
		435					440					445			
Asp	Ser	lle	Glu	Val	Ser	Arg	Asn	Val	Glu	Glu	11e	Val	Val	Lys	He
	450					455					460				
He	Ser	Val	Phe	Val	Asp	Ala	Leu	Pro	His	Val	Pro	Glu	His	Arg	Arg
465					470					475					480
Leu	Pro	11e	Leu	Val	Gln	Leu	Val	Asp	Thr	Leu	Gly	Ala	Glu	Lys	Phe
				485					490					495	

Leu	Trp	He	Leu	Leu	He	Leu	Leu	Phe	Glu	Gln	Tyr	Val	Thr	Lys	Thr
			500					505					510		
Val	Leu	Ala	Ala	Ala	Tyr	Gly	Glu	Lys	Asp	Ala	lle	Leu	Glu	Ala	Asp
		515					520					525			
Thr	Glu	Phe	Trp	Phe	Ser	Val	Cys	Cys	Glu	Phe	Ser	Val	Gln	His	Gln
	530					535					540				
lle	Gln	Ser	Leu	Met	Asn	He	Leu	Gln	Tyr	Leu	Leu	Lys	Leu	Pro	Glu
545					550					555					560
G1u	Lys	G1u	Glu	Thr	Ile	Pro	Lys	Ala	Val	Ser	Phe	Asn	Lys	Ser	Glu
				565					570					575	
Ser	Gln	Glu	Glu	Met	Leu	Gln	Val	Phe	Asn	Va]	Glu	Thr	His	Thr	Ser
			580					585					590		
Lys	Gln	Leu	Arg	His	Phe	Lys	Phe	Leu	Ser	Val	Ser	Phe	Met	Ser	Gln
		595					600					605			
Leu	Leu	Ser.	Ser	Asn	Asn	Phe	Leu	Lys	Lys	Va]	Val	Glu	Ser	G1 y	G1 y
	610					615					620				
Pro	Glu	He	Leu	Lys	Gly	Leu	Glu	Glu	Arg	Leu	Leu	Glu	Thr	Val	Leu
625					630					635					640
Gly	Tyr	Ile	Ser	Ala	Val	Ala	Gln	Ser	Met	Glu	Arg	Asn	Ala	Лѕр	Lys
				645					650					655	
Leu	Thr	Val	Lys	Phe	Trp	Arg	Ala	Leu	Leu	Ser	Lys	Ala	Tyr	Asp	Leu
			660					665					670		
Leu	Asp	Lys	Va]	Asn	Ala	Leu	Leu	Pro	Thr	Glu	Thr	Phe	He	Pro	Val
		675					680					685			
lle	Arg	Gly	Leu	Val	Gly	Asn	Pro	Leu	Pro	Ser	Val	Arg	Arg	Lys	Ala
	690					695					700				
Leu	Asp	Leu	Leu	Asn	Asn	Lys	Leu	Gln	Gln	Asn	He	Ser	Trp	Lys	Lys
705					710					715					720
Thr	He	Val	Thr	Arg	Phe	Leu	Lys	Leu	Val	Pro	Asp	Leu	Leu	Ala	He
				725					730					735	
Val	Gln	Arg	Lys	Lys	Lys	Glu	Gly	Glu	Glu	Glu	Gln	Ala	He	Asn	Arg
			740					745					750		
Gln	Thr	Ala	Leu	Tyr	Thr	Leu	Lys	Leu	Leu	Cys	Lys	Asn	Phe	Gly	Ala
		755					760					765			
Glu	Asn	Pro	Лsp	Pro	Phe	Val	Pro	Va]	Leu	Asn	Thr	Ala	Val	Lys	Leu
	770					775					780				

lle	Ala	Pro	Glu	Arg	Lys	Glu	Glu	Lys	Asn	Val	Leu	Gly	Ser	Ala	Leu
785					790					795					800
Leu	Cys	11e	Ala	GIu	Val	Thr	Ser	Thr	Leu	Glu	Ala	Leu	Λla	11e	Pro
				805					810					815	
Gln	Leu	Pro	Ser	Leu	Met	Pro	Pro	Leu	Leu	Thr	Thr	Met	Lys	Λsn	Thr
			820					825					830		
Ser	Glu	Leu	Val	Ser	Ser	Glu	Val	Tyr	Leu	Leu	Ser	Λ1а	Leu	Ala	Ala
		835					840					845			
Leu	Gln	Lys	Val	Val	Glu	Thr	Leu	Pro	His	Phe	lle	Ser	Pro	Tyr	Leu
	850					855					860				
Glu	Gly	Ile	Leu	Ser	Gln	Val	lle	His	Leu	Glu	Lys	He	Thr	Ser	Glu
865					870					875					880
Met	Gly	Ser	Ala	Ser	Gln	Ala	Asn	lle	Arg	Leu	Thr	Ser	Leu	Lys	Lys
				885					890					895	
Thr	Leu	Ala	Thr	Thr	Leu	Ala	Pro	Arg	Val	Leu	Leu	Pro	Ala	He	Lys
			900					905					910		
Lys	Thr	Tyr	Lys	Gln	lle	Glu	Lys	Asn	Trp	Lys	Asn	His	Met	Gly	Pro
		915					920					925			
Phe	Met	Gly	11e	Leu	Gln	Glu	His	Ile	Gly	Val	Met	Lys	Lys	Glu	Glu
	930					935					940				
Leu	Thr	Ser	His	Gln	Ser	Gln	Leu	Thr	Ala	Phe	Phe	Leu	Glu	Ala	Leu
945					950					955					960
Asp	Phe	Arg	Ala	Gln	His	Ser	Glu	Λsn	Asp	Leu	Glu	Glu	Val	Gly	Lys
				965					970					975	
Thr	Glu	Asn	Cys	He	lle	Asp	Cys	Leu	Val	Ala	Met	Va]	Val	Lys	Leu
			980					985					990		
Ser	Glu	Val	Thr	Phe	Arg	Pro	Leu	Phe	Phe	Lys	Leu	Phe	Asp	Trp	Ala
		995					1000					1005			
Lys	Thr	Glu	Asp	Ala	Pro	Lys	Asp	Arg	Leu	Leu	Thr	Phe	Tyr	Asn	Leu
1	1010					1015					1020				
Ala	Asp	Cys	lle	Ala	Glu	Lys	Leu	Lys	Gly	Leu	Phe	Thr	Leu	Phe	Ala
1025	5				1030					1035					1040
Gly	His	Leu	Val	Lys	Pro	Phe	Ala	Asp	Thr	Leu	Asn	Gln	Val	Asn	He
				1045					1050					1055	
Ser	Lys	Thr	Asp	Glu	Ala	Phe	Phe	Asp	Ser	Glu	Asn	Asp	Pro	Glu	Lys
			1060					1065					1070		

Cys Cys Leu Leu Gln Phe Ile Leu Asn Cys Leu Tyr Lys Ile Phe Leu Phe Asp Thr Gln His Phe Ile Ser Lys Glu Arg Ala Glu Ala Leu Met Met Pro Leu Val Asp Gln Leu Glu Asn Arg Leu Gly Gly Glu Glu Lys Phe Gln Glu Arg Val Thr Lys His Leu Ile Pro Cys Ile Ala Gln Phe Ser Val Ala Met Ala Asp Asp Ser Leu Trp Lys Pro Leu Asn Tyr Gln lle Leu Leu Lys Thr Arg Asp Ser Ser Pro Lys Val Arg Phe Ala Ala Leu lle Thr Val Leu Ala Leu Ala Glu Lys Leu Lys Glu Asn Tyr lle Val Leu Leu Pro Glu Ser lle Pro Phe Leu Ala Glu Leu Met Glu Asp Glu Cys Glu Glu Val Glu His Gln Cys Gln Lys Thr Ile Gln Gln Leu Glu Thr Val Leu Gly Glu Pro Leu Gln Ser Tyr Phe

<210> 3562

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3562

Met Ser Arg Arg Arg Glu Glu Thr His Cys Trp Lys Lys Gln Pro Met

1 5 10 15

Thr Ala Pro Leu Pro Gly Thr Arg Pro His Pro Leu Pro Ala Pro Leu
20 25 30

Pro Gly Val Gln Pro Lys Arg Thr Tyr Val Leu Thr Pro Leu Lys Pro
35 40 45

Leu Val Leu Ser Pro Gln Glu Thr Trp Leu Cys Val Cys Glu Trp Leu 50 55 60

 Thr Phe Leu His Pro Leu Val Leu Pro Phe Pro Ser Arg Gly Thr Glu

 65
 70
 75
 80

 Arg Gln Gly Arg Ile His Val Pro Ile Val Glu Ala Glu Lys Arg Glu
 85
 90
 95

 Ser Val Leu Tyr Thr Val Leu Ile
 100
 110
 110
 110

<210> 3563

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3563

Met Leu Arg Ala Phe Leu Phe Leu Ser Leu Phe Pro His Ser Gln Val 1 5 10 15 Leu Val Tyr Glu Leu Leu Leu Gly Lys Gly Phe Arg Gly Gly Gly Gly 20 25 30

Arg Trp Lys Ala Leu Leu Gly Arg His Gln Ala Arg Leu Lys Ala Glu 35 40 45

Leu Ala Arg Leu Lys Val His Arg Gly Val Ser Arg Asn Glu Asp Leu 50 55 60

Leu Glu Val Gly Ser Arg Pro Gly Pro Ala Ser Gln Leu Pro Arg Phe
65 70 75 80

Val Arg Val Asn Thr Leu Lys Thr Cys Ser Asp Asp Val Val Asp Tyr 85 90 95

Phe Lys Arg Gln Gly Phe Ser Tyr Gln Gly Arg Ala Ser Ser Leu Asp 100 105 110

Asp Leu Arg Ala Leu Lys Gly Lys His Phe Leu Leu Asp Pro Leu Met 115 120 125

Pro Glu Leu Val Phe Pro Ala Gln Thr Asp Leu His Glu His Pro 130 135 140

Leu Tyr Arg Ala Gly His Leu Ile Leu Gln Asp Arg Ala Ser Cys Leu 145 150 155 160
Pro Ala Met Leu Leu Asp Pro Pro Pro Gly Ser His Val Ile Asp Ala

				165					170					175	
Cys	Ala	Ala	Pro	Gly	Asn	Lys	Thr	Ser	His	Leu	Ala	Ala	Leu	Leu	Lys
			180					185					190		
Asn	Gln	Gly	Ser	Leu	Pro	Leu	Thr	Trp	Met	Pro	Ser	Gly	Trp	His	Pro
		195					200					205			
Trp	Pro	Arg	Cys	Trp	Pro	Gly	Leu	Ala	Ser	Leu	Ala	Val	Asn	Trp	Leu
	210					215					220				
Arg	۸rg	Thr	Ser	Trp	Arg	Ser	Pro	Pro	Arg	lle	His	Ala	Thr	Met	Arg
225					230					235					240
Ser	Thr	Thr	Ser	Cys	Trp	Ile	Leu	Pro	Ala	Val	Ala	Arg	Val	Cys	Arg
				245					250					255	
Ala	Asp	Ser	Trp	Arg	Ser	Pro	Gly	Gln	Ala	His	Leu	Ala	Arg	Cys	Val
			260					265					270		
Cys	Met	Pro	Trp	Gln	Gly	Ser	Ser	Ser	Glu	Pro	Cys	Ala	Thr	Arg	Ser
		275					280					285			
Leu	Ser	Leu	Pro	Cys	Ser	Gly	Ser	Ser	Thr	Pro	Arg	Ala	Pro	Ser	Ala
	290					295					300				
Arg	Arg	Arg	Met	Lys	Thr	Trp	Cys	Glu	Met	Arg	Cys	Ser	Arg	Thr	Arg
305					310					315					320
Ala	Pro	Ser	Gly												

<210> 3564

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3564

 Met
 Val
 Ser
 Val
 Arg
 Gly
 Gln
 Cys
 Pro
 Arg
 Gly
 Gly
 Phe
 Trp
 Leu
 Gly

 Pro
 Ser
 Val
 Ala
 Glu
 Ala
 Gly
 Asp
 Leu
 Leu
 Ala
 Val
 Asn
 Ser
 Gly
 Val

 Cys
 Arg
 Pro
 Gly
 Gly
 His
 Arg
 Gly
 Arg
 Ser
 Ser
 Ala
 Leu
 Gly
 Pro
 Leu

 35
 40
 45
 45
 45
 45
 45
 45

Cys Gly Ser Trp Thr Arg Ser Arg Glu Pro Gln Arg Pro Val Pro Ser Pro Arg Gly Asp Leu Gly Pro Arg Pro Trp Ser Pro Leu Trp Ala Ala Leu Arg Pro Gln Pro Arg Val Ser Pro Asp Cys Ser Val Thr Ala Gly Gly Ser Trp Gly Asp Pro Ile Ser Val Cys Gly Val Cys Ala Phe Lys Lys Pro Leu Gly Trp Lys Pro Tyr Asp Glu Ser Thr Gly Ala Phe Pro His Leu <210> 3565 <211> 121 <212> PRT <213> Homo sapiens <400> 3565 Met Ser Leu Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg Arg Gln Pro Arg Tyr Pro Arg Lys Ser Thr Pro Thr Arg Asn Lys Leu Gly His Tyr Ala Ile Ile Lys Phe Pro Leu Ala Thr Glu Ser Ala Val Lys Lys lle Glu Glu Asn Asn Thr Leu Val Phe Thr Val Asp Val Lys Asp Asn Lys His Gln Ile Arg Gln Ala Val Lys Lys Val Tyr Asp Ser Asp Val Ala Lys Val Thr Thr Leu Ile Cys Pro Asp Lys Glu Lys Lys Ala Tyr Val Arg Leu Ala Pro Asp Tyr Asp Ala Phe Asp Val Val Thr Lys Leu Gly Ser Pro Lys Leu Ser Pro Ala Gly

<210> 3566 <211> 102 <212> PRT <213> Homo sapiens ⟨400⟩ 3566 Met Gly Trp Gly Ser Arg Leu His His Met Ala Gly Ala Gln Ala Arg 5 1 10 15 Arg Gly Ser Gly Trp Gly Ser Met Trp Gly Ala Trp Leu Trp Asp Pro 20 25 Gly Gly Pro Gly Pro Cys Arg Pro Ala Val Gln Val Ser Ser Ala Asp 40 45 Ala Arg Leu Met Val Phe Asp Lys Thr Glu Gly Thr Trp Arg Leu Leu 50 55 Cys Ser Ser Arg Ser Asn Ala Arg Val Ala Gly Leu Ser Cys Glu Glu 70 75 Met Gly Phe Leu Arg Tyr Trp Gly Pro Ser Glu Gly Trp Glu Pro Gly 85 90 95 Gly Ala Gly Glu Gln Ala 100 <210> 3567 <211> 203 <212> PRT <213> Homo sapiens <400> 3567 Met Trp Ser Ala Ala Ser Thr Pro Pro Gly Thr Ala Ala Ser Ser Pro Thr Thr Gln His Pro Gly Lys Trp Ser Arg Ser Trp Trp Pro Leu Gly 20 25 30

Ser Arg Pro Leu Ala Ser Val Pro Ser Thr Thr Trp Ala Pro Thr Pro

45

40

Ser Ala Ser Pro Ser Ser Ser Cys Ser Gly Ser Gln Gly Ser Arg Gly 55 His Gly Arg Gly His Leu Glu Gly Glu Val Leu Pro Ser Met Gly Val 70 75 80 Val Ser Leu Cys Thr Pro Asn Gln Glu Pro Asp Ala Glu Ser Gln Gly 85 90 Lys Gln Gly Pro Leu Lys Ser Arg Asn Leu Leu Gly Pro Pro Ser Gly 105 Leu Pro Trp Gly Leu Gln Asp His Trp Gly Ser Thr Val Ser Gly Trp 115 125 120 Leu Gln Leu Leu Ser Tyr Trp Tyr Cys Cys Ala Arg Gly Glu Gly Met 135 140 Arg Gly Ser Ala Arg Lys Glu Arg Arg Val Ser Ser Ser Asp Thr Ala 150 155 Val Cys Ser Glu Lys Thr Pro Val Pro Arg Ile Val Glu Ile Glu Val 165 170 Gly Arg Glu Glu Val Arg Glu Arg Leu Trp Pro Gln Gly Gln Leu 185 180 190 Thr Thr Asn Pro Leu Pro Thr Gln Ala Leu Ser 195 200

<210> 3568

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3568

 Met
 Asn
 Leu
 Lys
 Arg
 Tyr
 Phe
 Glu
 Gln
 Lys
 His
 Arg
 Thr
 Glu
 Ala
 Ser

 I
 5
 5
 10
 10
 15
 15
 15

 Val
 Pro
 Ala
 Pro
 Gln
 Ala
 Ala
 Cys
 Val
 Pro
 Gly
 Tyr
 Pro
 Val
 Pro
 Ser
 Ser
 Gly
 Thr
 Gly
 Ser
 Ser
 Gly
 Thr
 Gly

 Asp
 Pro
 Gly
 Glu
 Ala
 Gly
 Leu
 Ser
 Cys
 Thr
 Gly
 Ser
 Ser
 Gly
 Thr
 Gly

 Tyr
 Cys
 Ala
 Ser
 Gln
 Phe
 Ser
 Val
 The
 Ser
 His
 Leu
 Arg
 Thr
 The
 Phe

 Tyr
 Cys
 Ala
 Ser
 Gln
 Phe
 Ser
 Val
 The
 Ser
 His
 Leu
 Arg
 Thr
 The
 Phe

 Tyr
 Cys
 Ala
 Ser

Leu Pro Glu Leu Arg Pro Leu Pro Arg Leu Ser Leu Glu Asp Thr Asn Asn Glu Asp Thr Asn Asn Glu His Leu Leu Gly Ser Pro Glu Asp Pro 90 His Met Glu Ala Ala Gln Pro Ser Pro Tyr Pro Glu Ala His Arg Leu 100 105 His Lys Pro Arg Pro Gly Pro Ser Leu Met Ala His Arg Gln Val Leu 125 120 Arg Thr Pro Thr Ala Leu Leu 130 135

<210> 3569

<211> 534

<212> PRT

<213> Homo sapiens

<400> 3569

130

Met Ser Leu Leu Arg Asp Ser Arg Asn Tyr Ser Gln Glu Thr Val Pro 1 5 10 15 Lys Ala Asn Phe Gly Phe Ser Gly Ile Ser Pro Leu Glu Asp Glu Ile 25 Asn Lys Gly Ser Lys lle Ser Gly Leu Gln Tyr Ser lle Pro Asp Thr 40 Glu Asn Gln Thr Leu Asn Tyr Gly Lys Thr Lys Glu Met Glu Lys Gln 50 60 55 Asn Thr Asp Lys Cys His Val Ser Ser His Thr Arg Leu Thr Glu Ser 70 75 Ser Val His Asp Phe Lys Thr Glu Asp Gln Glu Val lle Thr Thr Asp 85 Phe Gly Gln Val Val Leu Arg Pro Lys Glu Ala Arg His Ala Asn Val 105 Asn Pro Asn Glu Asp Gly Glu Ser Ser Ser Ser Ser Pro Thr Glu Glu 115 120 125

Asn Ala Ala Thr Asp Asn lle Ala Phe Met lle Thr Glu Thr Thr Val

140

Gln	Val	Leu	Ser	Ser	Gly	Glu	Val	His	Asp	Ile	Val	Ser	Gln	Lys	Gly
145					150					155					160
Glu	Asp	11e	Gln	Thr	Val	Asn	He	Asp	Ala	Arg	Lys	Glu	Met	Thr	Pro
				165					170					175	
Arg	Gln	Glu	Gly	Thr	Asp	Asn	Glu	Asp	Pro	Va]	Val	Cys	Leu	Asp	Lys
			180					185					190		
Lys	Pro	Val	He	Пе	He	Phe	Asp	Glu	Pro	Met	Asp	lle	Arg	Ser	Ala
		195					200					205			
Tyr	Lys	Arg	Leu	Ser	Thr	Ile	Phe	Glu	$\hbox{\rm Gl} u$	Cys	Asp	Glu	Glu	Leu	Glu
	210					215					220				
Arg	Met	Met	Met	Glu	Glu	Lys	Пe	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asn
225					230					235					240
Gly	Asp	Ser	Val	Val	Gln	Λsn	Asn	Asn	Thr	Ser	Gln	Met	Ser	His	Lys
				245					250					255	
Lys	Val	Ala	Pro	Gly	Asn	Leu	Arg	Thr	Gly	Gln	Gln	Val	Glu	Thr	Lys
			260					265					270		
Ser	Gln	Pro	His	Ser	Leu	Ala	Thr	Glu	Thr	Arg	Asn	Pro	Gly	Gly	Gln
		275					280					285			
Glu	Met	Asn	Arg	Thr	Glu	Leu	Asn	Lys	Phe	Ser	His	Val	Asp	Ser	Pro
	290					295					300				
Asn	Ser	Glu	Cys	Lys	Gly	Glu	Asp	Ala	Thr	Asp	Asp	Gln	Phe	Glu	Ser
305					310					315					320
Pro	Lys	Lys	Lys	Phe	Lys	Phe	Lys	Phe	Pro	Lys	Lys	Gln	Leu	Ala	Ala
				325					330					335	
Leu	Thr	Gln	Ala	Пе	Arg	Thr	Gly	Thr	Lys	Thr	Gly	Lys	Lys	Thr	Leu
			340					345					350		
GIn	Val	Va]	Val	Tyr	Glu	Glu	Glu	Glu	Glu	Asp	Gly	Thr	Leu	Lys	Gln
		355					360					365			
His	Lys	Glu	Ala	Lys	Arg	Phe	Glu	He	Ala	Arg	Ser	Gln	Pro	Glu	Asp
	370					375					380				
Thr	Pro	Glu	Asn	Thr	Val	Arg	Arg	Gln	Glu	Gln	Pro	Ser	lle	Glu	Ser
385					390					395					400
Thr	Ser	Pro	Пе	Ser	Arg	Thr	Asp	Glu	11e	Arg	Lys	Asn	Thr	Tyr	Arg
				405					410					415	
Thr	Leu	Asp	Ser	Leu	Glu	G1n	Thr	11e	Lys	Gln	Leu	Glu	Asn	Thr	lle
			420					425					430		

Ser Glu Met Ser Pro Lys Ala Leu Val Asp Thr Ser Cys Ser Ser Asn Arg Asp Ser Val Ala Ser Ser Ser His Ile Ala Gln Glu Ala Ser Pro Arg Pro Leu Leu Val Pro Asp Glu Gly Pro Thr Ala Leu Glu Pro Pro Thr Ser lle Pro Ser Ala Ser Arg Lys Gly Ser Ser Gly Ala Pro Gln Thr Ser Arg Met Pro Val Pro Met Ser Ala Lys Asn Arg Pro Gly Thr Leu Asp Lys Pro Gly Lys Gln Ser Lys Leu Gln Asp Pro Arg Gln Tyr Arg Gln Val Val Leu Pro

<210> 3570

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3570

Met Ala Pro Glu Asp Pro Ala Ser Leu Arg His Gly Leu Trp His Gln Arg Thr Gln Pro Leu Ala Pro Trp Thr Met Ala Ala Glu Asp Pro Ala Pro Arg Ile Leu Asp Tyr Gly Ser Arg Gly Pro Ser Leu Pro Ala Ser Trp Thr Lys Ala Pro Glu Asp Pro Ala Pro Ser Gly Pro Gly Leu Trp

Gln Gln Arg Thr Gln Pro Leu Ala Ser Trp Thr Met Ala Pro Glu Asp

Pro Ala Ser Leu Arg His Gly Leu Trp His Gln Arg Thr Gln Pro Leu

Ala Pro Trp Thr Met Ala Ala Glu Asp Pro Ala Pro Trp Arg Pro Gly

Leu Arg His Ser Arg Thr Pro Gln His Arg Val Leu Leu His Arg Arg

115

120

125

Thr Leu Ala Gly Leu Arg Pro Gly Leu Ser Tyr

130

135

<210> 3571

<211> 345

<212> PRT

<213> Homo sapiens

<400> 3571

Met Asp Gly Glu Gln Leu Glu Gly Ala Ser Ser Glu Lys Arg Glu Arg

1 5 10 15

Glu Ala Ala Glu Glu Gly Leu Ala Ser Val Lys Arg Pro Arg Arg Glu

20 25 30

Ala Leu Ser Asn Asp Thr Thr Glu Ser Leu Ala Ala Asn Ser Arg Gly
35 40 45

Arg Glu Lys Pro Arg Pro Leu His Ala Leu Ala Ala Gly Phe Ser Pro 50 55 60

Pro Val Asn Val Thr Val Ser Pro Arg Ser Glu Glu Ser His Thr Thr
65 70 75 80

Thr Val Ser Gly Gly Asn Gly Ser Val Phe Gln Ala Gly Pro Gln Leu 85 90 95

Gln Ala Leu Ala Asn Leu Glu Ala Arg Arg Gly Ser Ile Gly Ala Ala 100 105 110

Leu Ser Ser Arg Asp Val Ser Gly Leu Pro Val Tyr Ala Gln Ser Gly 115 120 125

Glu Pro Arg Arg Leu Thr Gln Ala Gln Val Ala Ala Phe Pro Gly Glu 130 135 140

Asn Ala Leu Glu His Ser Ser Asp Gln Asp Thr Trp Asp Ser Leu Arg 145 150 155 160

Ser Pro Gly Phe Cys Ser Pro Leu Ser Ser Gly Gly Gly Ala Glu Ser 165 170 175

Leu Pro Pro Gly Gly Pro Gly His Ala Glu Ala Gly His Leu Gly Lys 180 185 190 Val Cys Asp Phe His Leu Asn His Gln Gln Pro Ser Pro Thr Ser Val Leu Pro Thr Glu Val Ala Ala Pro Pro Leu Glu Lys Ile Leu Ser Val 220 215 Asp Ser Val Ala Val Asp Cys Ala Tyr Arg Thr Val Pro Lys Pro Gly 225 230 235 Pro Gln Pro Gly Pro His Gly Ser Leu Leu Thr Glu Gly Cys Leu Arg 245 250 Ser Leu Ser Gly Asp Leu Asn Arg Phe Pro Cys Gly Met Glu Val His 270 260 265 Ser Gly Gln Arg Glu Leu Glu Ser Val Val Ala Val Gly Glu Ala Met 285 280 Ala Phe Glu Ile Ser Asn Gly Ser His Glu Leu Leu Ser Gln Gly Gln 295 300 Lys Gln Ile Phe Ile Gln Thr Ser Asp Gly Leu Ile Leu Ser Pro Pro 305 310 315 320 Gly Thr lle Val Ser Gln Glu Glu Asp Ile Val Thr Val Thr Asp Ala 325 330 335 Glu Gly Arg Ala Cys Gly Trp Ala Arg 340 345

<210> 3572

<211> 484

<212> PRT

<213> Homo sapiens

<400> 3572

 Met
 Glu
 Ala
 Glu
 Ala
 Glu
 Ala
 Glu
 Ala
 Ser
 Ala
 Ser
 Pro
 Pro
 Ile
 Ser
 Ala

 1
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 1

Arg	Asp	Val	Cys	Asp	Tyr	Ala	He	Glu	Thr	Met	Pro	Ser	Phe	Pro	Lys
65					70					75					80
Glu	Gly	Ser	Ala	Asp	Val	G1u	Pro	Asn	Gln	$\operatorname{GI} u$	Ser	Leu	Val	Ala	Glu
		•		85					90					95	
Ala	Cys	Asp	Thr	Pro	Glu	His	Trp	Glu	Ala	Val	Pro	GIn	Ser	Leu	Ala
			100					105					110		
Gly	Arg	G1n	Ala	Arg	Thr	Leu	Ala	Pro	Pro	G] u	Leu	Trp	Ala	Cys	Pro
		115					120					125			
Ile	Gln	Ser	Glu	His	Leu	Asp	Met	Ala	Pro	Phe	Ser	Ser	Asp	Leu	Gly
	130					135					140				
Ser	Glu	Glu	Glu	Glu	Val	Glu	Phe	Trp	Pro	Gly	Leu	Thr	Ser	Leu	Thr
145					150					155					160
Leu	Gly	Ser	Gly	Gln	Ala	Glu	Glu	Glu	Glu	Glu	Thr	Ser	Ser	Așp	Asn
				165					170					175	
Ser	Gly	Gln	Thr	Arg	Tyr	Tyr	Ser	Pro	Cys	Glu	Glu	His	Pro	Ala	Glu
			180					185					190		
Thr	Asn	Gln	Asn	Glu	Gly	Ala	G]u	Ser	Gly	Thr	lle	Arg	Gln	Gly	Glu
		195					200					205			
Glu		Pro	Ser	Glu	Glu	Leu	Gln	Glu	Ser	Gln	Gly	Leu	Leu	His	Pro
	210					215					220				
G1n	Glu	Val	Gln	Val		Glu	Glu	Gln	Gly		Gln	Glu	Ala	Gly	
225					230					235					240
Arg	Gly	Glu	Gly		Leu	Arg	Glu	Asp		Cys	Ala	Asp	Gly		Leu
				245					250					255	
Gly	Glu	Glu		Met	lle	Glu	Gln		Asn	Asp	Glu	Lys		Glu	G]n
			260					265					270	0.1	.
Lys	GIn		GIn	Glu	GIn	Val		Asp	Val	Met	Leu		Arg	GIn	Gly
0.1		275	0.1		m.	0.1	280	Б	<i>a</i> 1	6.1		285		6.1	61
Glu		Met	Gly	Leu	Ihr	Gly	Glu	Pro	Glu	GLy		Asn	Asp	61 y	61u
Tr.	290	61	0.1	,	14 .	295			. 7	C1	300	C.I	61	61	15
	Glu	GIn	61u	Asp		G] u	Arg	Lys	MIA		61 y	GIn	GIY	G1 ÿ	
305	C l	C1	C I	C1	310	,	Α.	C1	1	315	V. 1	D	C1	C1	320
61u	GIN	61 y	Glu		Arg	Lys	Arg	6J U		σīn	val	rro	GIU		Asn
A	A1.	Α	C	325	Δ	C1.	1	C =	330	ть.	DI: -	1 -:	C1.	335	C
arg	W19	нѕр		01n	ASP	Glu	Lys		01 J	ınr	rne	Leu		Lys	ser
			340					345					350		

Glu Glu Val Thr Gly Lys Gln Glu Asp His Gly Ile Lys Glu Lys Gly 360 Val Pro Val Ser Gly Gln Glu Ala Lys Glu Pro Glu Ser Trp Asp Gly 370 375 Gly Arg Leu Gly Ala Val Gly Arg Ala Arg Ser Arg Glu Glu Glu Asn 390 395 400 Glu His His Gly Pro Ser Met Pro Ala Leu Ile Ala Pro Glu Asp Ser 405 410 Pro His Cys Asp Leu Phe Pro Gly Ala Ser Tyr Leu Val Thr Gln Ile 420 425 430 Pro Gly Thr Gln Thr Glu Ser Arg Ala Glu Glu Leu Ser Pro Ala Ala 440 445 Leu Ser Pro Leu Leu Glu Pro Ile Arg Cys Ser His Gln Pro Ile Ser 450 455 460 Leu Leu Gly Ser Phe Leu Thr Glu Glu Ser Pro Asp Lys Glu Lys Leu 465 470 475 480 Leu Ser Val Leu

<210> 3573

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3573

Met Pro Ser Ser Pro Thr Trp Ala Leu lle Leu His lle Arg Leu Pro
1 5 10 15

Thr Leu Thr Pro Pro Ile Gly Pro Pro Gln Pro Cys Thr Tyr Ser Pro
20 25 30

His Gly Cys Gln Pro His Pro Ala His Ala Glu Ser Pro Cys Cys Gly
35 40 45

Val Pro Pro His Gly Gln Leu His Thr Leu Leu Gly Leu Thr Pro Ala 50 55 60

Leu Pro Thr Ser Thr Pro Ser Leu Pro Cys Thr Gly Pro Pro Pro Arg
65 70 75 80

Val Asp Val Leu Cys Gly Arg Gln Ser Gly Ala Pro Lys Asp Gly His Thr Leu Ser Pro Gly Thr Cys Glu Cys Tyr Met Ala Lys Gly Thr Leu Gln lle Lys lle Lys lle Val Asn Phe Lys Thr Gly Lys Leu Ser Trp Ile lle Cys Met Gly Pro Met Gln Ser Gln Gly Ser Ile Arg Ile Glu Lys Ala Gly Arg Lys Lys Gly Arg Trp Glu Arg Gly Thr Gly Pro Ala Ala Ala Gly Gly Lys

<210> 3574

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3574

Met Ser Thr Ile Gly Ser Phe Glu Gly Phe Gln Ala Val Ser Leu Lys Gln Glu Gly Asp Asp Gln Pro Ser Glu Thr Asp His Leu Ser Met Glu Glu Glu Asp Pro Met Pro Arg Gln Ile Ser Arg Gln Ser Ser Val Thr Glu Ser Thr Leu Tyr Pro Asn Pro Tyr His Gln Pro Tyr Ile Ser Arg Lys Tyr Phe Ala Thr Arg Pro Gly Ala Ile Glu Thr Ala Met Glu Asp Leu Lys Gly His Val Ala Glu Thr Ser Gly Glu Thr 11e Gln Gly Phe Trp Leu Leu Thr Lys 11e Asp His Trp Asn Asn Glu Lys Glu Arg 11e

Leu Leu Val Thr Asp Lys Thr Leu Leu lle Cys Lys Tyr Asp Phe lle

Met Leu Ser Cys Val Gln Leu Gln Arg 11e Pro Leu Ser Ala Val Tyr Arg Ile Cys Leu Gly Lys Phe Thr Phe Pro Gly Met Ser Leu Asp Lys Arg Gln Gly Glu Gly Leu Arg Ile Tyr Trp Gly Ser Pro Glu Glu Gln Ser Leu Leu Ser Arg Trp Asn Pro Trp Ser Thr Glu Val Pro Tyr Ala Thr Phe Thr Glu His Pro Met Lys Tyr Thr Ser Glu Lys Phe Leu Glu lle Cys Lys Leu Ser Gly Phe Met Ser Lys Leu Val Pro Ala Ile Gln Asn Ala His Lys Asn Ser Thr Gly Ser Gly Arg Gly Lys Lys Leu Met Val Leu Thr Glu Pro Ile Leu Ile Glu Thr Tyr Thr Gly Leu Met Ser Phe lle Gly Asn Arg Asn Lys Leu Gly Tyr Ser Leu Ala Arg Gly Ser Ile Gly Phe <210> 3575 <211> 125 <212> PRT <213> Homo sapiens <400> 3575 Met Gln Pro Val Ile Ser Ala Leu Asn Ile Gln Thr Gln Thr Val Gln I Thr His Pro Ala Pro Arg Asn Thr Ser Glu His Cys Thr Leu Pro Ala Cys Asp Ala Gln Glu Glu His Arg Asp Thr Val Asp Gly Ser Ile Ala Arg Thr Glu Ser Ala Ser Gly Glu lle Trp Arg Gln Thr His Met Asp

Gly Glu His His Val Asn Thr Lys Ala Glu lle Ser Val Met Ser Ala 65 70 75 80

Asn Gln Gly Ala Pro Arg lle Thr Ser Lys Pro Pro Glu Ala Arg Arg 85 90 95

Glu Ala Arg Asp Arg Ser Leu Pro Ser Ala Phe Ser Leu Arg Gly Leu 100 105 105 110

Thr Asp Thr Leu Ile Leu Gly Phe Cys Pro Pro Glu Leu 125

<210> 3576

<211> 327

<212> PRT

<213> Homo sapiens

<400> 3576

130

145

Met Ser Leu Met Thr Arg Glu Asn Leu Ala Phe Arg Gly Ser Leu Met 5 10 Gly Cys Ser Glu Leu Lys Pro Phe Gln Glu Leu Thr His Gln Ser Ala 20 25 30 Val Ser His Ser Arg Ala Asp Val Ala Asp Val Trp Trp Tyr Cys Gly 40 Gly Pro Leu Leu Asp Thr Leu Pro Ser Asn Trp Ser Gly Thr Cys Thr 55 Leu Val Gln Phe Ala Ile Pro Phe Ala Leu Ala Phe Leu Gln Pro Glu 70 75 65 Lys Glu Lys Pro Gln His Arg Lys Ile Arg Glu Ala Pro Tyr Gly Ser 90 85 Phe Asp Ser Gln Val Tyr Leu Asp Ala Thr Gly Val Pro Gln Gly Val 100 110 105 Pro His Lys Phe Lys Ala Gln Asp Gln lle Ala Ala Gly Phe Glu Ser 120

lle Phe Trp Trp Val Thr lle Ser Lys Asn Ile Asp Trp lle Asn Tyr

lle Tyr Tyr Asn Gln Gln Arg Phe lle Asn Tyr Thr Arg Asp Ala Val

140

160

155

135

Lys Gly Ile Ala Glu Gln Leu Gly Pro Thr Ser Gln Met Ala Trp Glu Asn Arg Met Ala Leu Asp Met 11e Leu Ala Lys Lys Gly Gly Val Cys Val Met 11e Lys Thr Gln Cys Cys Thr Phe 11e Pro Asn Asn Thr Ala Pro Ser Gly Ser lle Thr Arg Ala Leu Gln Gly Leu Thr Ala Leu Ser Asn Glu Leu Ala Lys Asn Ser Gly Val Asn Asp Pro Phe Ser Gly Trp Leu Glu Arg Trp Phe Gly Lys Trp Lys Gly Ile Ile Ala Ser Ile Leu Thr Ser Leu Ala Ala Val Ile Gly Val Val Ile Leu Phe Gly Cys Cys Val Thr Pro Cys Ile Arg Gly Leu Val Gln Arg Leu Ile Glu Thr Val Leu Thr Lys Thr Ser Leu Ser Ser Pro Pro Pro Tyr Ser Asp Lys Leu Phe Leu Leu Glu Asp Gln Val Glu Gln Gln Ser Gln Asp Leu Leu Lys Arg Phe Glu Glu Glu Gly Pro

<210> 3577

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3577

 Met Leu Val Leu Thr Ser Ala 11e Pro Gln Ala Lys His Ser Phe Tyr

 1
 5
 10
 15

 Gln Ala His Cys Leu Ala Gly Gly Arg Lys Phe His Arg Leu Ser Leu
 20
 25
 30

 Gly Ser Phe Cys Arg Asn Asn Pro Tyr Ser Ser Gly Gln Gly Ala Asn
 35
 40
 45

 Val
 Ser
 11e
 Gln
 Leu
 Ala
 Lys
 Asn
 Val
 Tyr
 Pro
 Asn
 Lys
 Gln
 Gly

 Arg
 Pro
 Thr
 Asp
 Pro
 Leu
 Asp
 Pro
 Leu
 Glu
 Met
 Asp
 Leu
 Gly
 His
 Ser
 80

 Ala
 Phe
 His
 Asp
 Phe
 Ser
 Lys
 Gln
 Arg
 Gly
 Val
 Val
 Ile
 Leu
 Ser
 Lys

 Ser
 Trp
 Arg
 Gln
 Cys
 Gln
 Cys
 Pro
 Ala
 Thr
 His
 His
 Val
 Pro
 Val
 Leu

 Glu
 Lys
 Pro
 Leu
 Cys
 Trp
 Lys
 Trp
 Lys
 Trp
 Lys
 Trp
 Lys
 Trp
 Lys
 Trp
 Lys
 Ly

<210> 3578

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3578

Met Leu His Gly Leu Gly Pro Val Pro Pro Pro Leu Trp Ala Ala Val
1 5 10 15

Ser Ala Ser Arg Trp Gly Gly Gly Gly Pro Gln Pro Leu Pro Gln Val 20 25 30

Ser Lys Glu Gly Ser Gly Leu Ala Arg Pro Asp Pro Ser Cys Cys Val 35 40 45

Arg Ala Gly Leu Gly Ala Ala Lys Thr Pro Gly Ala Gln Gly Glu Arg 50 55 60

Leu Gly Pro Arg Gly Thr Arg Arg Ala Arg Gly Leu Gln Leu Arg Pro
65 70 75 80

Val Gly Gly Gln Ser Arg Arg Glu Ala Ala Pro Ala Cys Ser Gly Pro 85 90 95

Gln Pro Cys Arg Pro His Gly Thr Gly Ala Ala Ser Ser Leu Gly Leu 100 105 110

Gln Asp Ala Asp

155

160

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<210> 3579
<211> 169
<212> PRT
<213> Homo sapiens
<400> 3579
Met Leu Gln Ser Glu Ile Gln Ala Met Lys Lys Leu Arg His Lys His
                                     10
Ile Leu Ala Leu Tyr Ala Val Val Ser Val Gly Asp Pro Val Tyr Ile
             20
                                 25
                                                      30
Ile Thr Glu Leu Met Ala Lys Gly Ser Leu Leu Glu Leu Leu Arg Asp
                             40
Ser Asp Glu Lys Val Leu Pro Val Ser Glu Leu Leu Asp Ile Ala Trp
                         55
Gln Val Ala Glu Gly Met Cys Tyr Leu Glu Ser Gln Asn Tyr Ile His
65
                     70
                                         75
Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly Glu Asn Thr Leu Cys
                 85
                                     90
Lys Val Gly Asp Phe Gly Leu Ala Arg Leu Ile Lys Glu Asp Val Tyr
            100
                                105
                                                     110
Leu Ser His Asp His Asn 11e Pro Tyr Lys Trp Thr Ala Pro Glu Ala
                            120
                                                 125
Leu Ser Arg Gly His Tyr Ser Thr Lys Ser Asp Val Trp Ser Phe Gly
                        135
Ile Leu Leu His Glu Met Phe Ser Arg Gly Gln Val Pro Tyr Pro Gly
```

150

Thr Val Pro Thr Val Pro Asp Trp Ala 165

<210> 3580

145

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3580

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Met	Pro	lle	Ala	Ala	Phe	Gly	Gln	Lys	Gln	Arg	Pro	Ser	Arg	Phe	Phe
1				5					10					15	
Met	Thr	Pro	Pro	Arg	Leu	His	Tyr	Thr	Pro	Pro	Leu	Gln	Ser	Pro	Пe
			20					25					30		
He	Лsp	Asn	Asp	Pro	Leu	Leu	Gly	Gln	Ser	Pro	Trp	Arg	Ser	Lys	11e
		35					40					45			
Ser	Gly	Ser	Asp	Thr	Glu	Thr	Leu	Gly	G]y	Phe	Pro	Val	Glu	Phe	Leu
	50					55					60				
lle	Gln	Val	Thr	Arg	Leu	Ser	Lys	Πe	Leu	Met	Ile	Lys	Lys	Glu	His
65					70					75					80
Ile	Lys	Lys	Leu	Arg	Glu	Met	Asn	Thr	Glu	Ala	Glu	Lys	Leu	Lys	Ser
				85					90					95	
Tyr	Ser	Met	Pro	He	Ser	He	Ġlu	Phe	Gln	Arg	Arg	Tyr	Ala	Thr	He
			100					105					110		
Val	Leu	Glu	Leu	Glu	Gln	Leu	Asn	Lys	Asp	Leu	Asn	Lys	Val	Leu	His
		115					120					125			
Lys	Val	Gln	Gln	Tyr	Cys	Tyr	Glu	Leu	Ala	Pro	Asp	Gln	Gly	Leu	Gln
	130					135					140				
Pro	Ala	Asp	Gln	Pro	Thr	Asp	Met	Arg	Arg	Arg	Cys	Glu	Glu	Glu	Ala
145					150					155					160
G1n	Glu	lle	Val	Arg	His	Ala	Asn	Ser	Ser	Thr	Gly	Gln	Pro	Cys	Val
				165					170					175	
Glu	Asn	Glu	Asn	Leu	Thr	Asp	Leu	He	Ser	Arg	Leu	Thr	Ala	He	Leu
			180					185					190		
Leu	Gln	He	Lys	Cys	Leu	Ala	Glu	Gly	Gly	Asp	Leu	Asn	Ser	Phe	Glu
		195					200					205			
Phe	Lys	Ser	Leu	Thr	Asp	Ser	Leu	Asn	Asp	He	Lys	Ser	Thr	He	Asp
	210					215					220				
Ala	Ser	Asn	He	Ser	Cys	Phe	Gln	Asn	Asn	Val	Glu	lle	His	Val	Ala
225					230					235					240
His	He	Gln	Ser	Gly	Leu	Ser	Gln	Met	Gly	Asn	Leu	His	Ala	Phe	Ala
				245					250					255	
Ala	Asn	Asn	Thr	Asn	Arg	Asp									
			260												

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<211> 440
<212> PRT
<213> Homo sapiens
<400> 3581
Met Ala Glu Asn Asn Glu Asn Ile Ser Lys Asn Val Asp Val Arg Pro
                                      10
Lys Thr Ser Arg Ser Arg Ser Ala Asp Arg Lys Asp Gly Tyr Val Trp
             20
                                 25
Ser Gly Lys Glu Leu Ser Trp Ser Lys Lys Ser Glu Ser Tyr Ser Asp
                             40
                                                  45
Ala Glu Thr Val Asn Gly 11e Glu Lys Thr Glu Val Ser Leu Arg Asn
     50
                         55
Gln Glu Arg Lys His Ser Cys Ser Ser lle Glu Leu Asp Leu Asp His
                     70
                                          75
Ser Cys Gly His Arg Phe Leu Gly Arg Ser Leu Lys Gln Lys Leu Gln
                 85
                                      90
Asp Ala Val Gly Gln Cys Phe Pro Ile Lys Asn Cys Ser Ser Arg His
            100
                                 105
Ser Ser Gly Leu Pro Ser Lys Arg Lys 11e His 11e Ser Glu Leu Met
                            120
                                                 125
Leu Asp Lys Cys Pro Phe Pro Pro Arg Ser Asp Leu Ala Phe Arg Trp
    130
                        135
                                             140
His Phe lle Lys Arg His Thr Ala Pro lle Asn Ser Lys Ser Asp Glu
                                         155
145
                    150
                                                             160
Trp Val Ser Thr Asp Leu Ser Gln Thr Glu Leu Arg Asp Gly Gln Leu
                                     170
Lys Arg Arg Asn Met Glu Glu Asn Ile Asn Cys Phe Ser His Thr Asn
                                                     190
            180
                                 185
Val Gln Pro Cys Val 11e Thr Thr Asp Asn Ala Leu Cys Arg Glu Gly
                            200
                                                 205
Pro Mot Thr Gly Ser Val Met Asn Leu Val Ser Asn Asn Ser 11e Glu
                                             220
    210
                         215
```

Asp Ser Asp Met Asp Ser Asp Glu Ile Leu Thr Leu Cys Thr Ser

<210> 3581

225					230					235					240
Ser	Arg	Lys	Arg	Asn	Lys	Pro	Lys	Trp	Asp	Leu	Asp	Asp	Glu	He	Leu
				245					250					255	
Gln	Leu	Glu	Thr	Pro	Pro	Lys	Tyr	His	Thr	Gln	11e	Asp	Tyr	Val	His
			260					265					270		
Cys	Leu	Val	Pro	Asp	Leu	Leu	Gln	Πle	Asn	Asn	Asn	Pro	Cys	Tyr	Trp
		275					280					285			
Gly	Val	Met	Asp	Lys	Tyr	Ala	Ala	Glu	Ala	Leu	Leu	Glu	Gly	Lys	Pro
	290					295					300				
Glu	Gly	Thr	Phe	Leu	Leu	Arg	Asp	Ser	Ala	Gln	Glu	Asp	Tyr	Leu	Phe
305					310					315					320
Ser	Val	Ser	Phe	Arg	Arg	Tyr	Ser	Arg	Ser	Leu	His	Ala	Arg	lle	Glu
				325					330					335	
Gln	Trp	Asn	His	Asn	Phe	Ser	Phe	Asp	Ala	His	Asp	Pro	Cys	Val	Phe
			340					345					350		
His	Ser	Pro	Asp	He	Thr	Gly	Leu	Leu	Glu	His	Tyr	Lys	Asp	Pro	Ser
		355					360					365			
Ala	Cys	Met	Phe	Phe	Glu	Pro	Leu	Leu	Ser	Thr	Pro	Leu	lle	Arg	Thr
	370					375					380				
Phe	Pro	Phe	Ser	Leu	Gln	His	11e	Cys	Arg	Thr	Val	He	Cys	Asn	Cys
385					390					395					400
Thr	Thr	Tyr	Asp	Gly	He	Asp	Ala	Leu	Pro	lle	Pro	Ser	Ser	Met	Lys
				405					410					415	
Leu	Tyr	Leu	Lys	Glu	Tyr	His	Tyr	Lys	Ser	Lys	Va]	Arg	Val	Leu	Arg
			420					425					430		
He	Asp	Ala	Pro	Glu	Gln	Gln	Cys								
		435					440								

<210> 3582

<211> 105

<212> PRT

<213≻ Homo sapiens

<400> 3582

Met Phe Leu Val Thr Asn Ser Ile Trp Pro Asp Phe Lys Val Ser His 10 Pro Ser Phe Cys Gln Leu Gly 11e Cys Val Asn Val Leu 11e Leu Met 25 30 Lys Trp Ser Phe Leu Ser Gln Leu 11e Phe Leu Val 11e Asp Ser 11e 35 40 Cys Leu Leu Lys Leu Val Thr Ser Phe Cys Leu Leu Asp Ile Tyr 55 60 Met Val Cys His Pro Phe Ser Leu Asn Lys Ser Arg Ser Leu Cys Phe 70 75 65 80 Lys Val His Phe Leu Gln Lys Ala Tyr Arg His Phe Phe Ile Leu Ser 90 95 85 Leu Asn Pro Cys Met Arg Asn Ser Val 100 105

<210> 3583

<211> 301

<212> PRT

<213> Homo sapiens

<400> 3583

Met Cys Val Trp Arg Leu lle Leu Asp Ala Val Asp Gly Arg Glu Cys

1 5 10 15

His His Leu Val His Cys Tyr Met Pro Gln Glu Ile Ile Ala Gln Pro 20 25 30

Phe Leu Asn Phe Lys Val Phe Leu Phe Asn Arg Phe Cys Thr Asp Cys 35 40 45

Lys Asn Lys Val Leu Arg Ala Tyr Asn Ile Leu lle Gly Glu Leu Asp 50 55 60

Cys Ser Lys Glu Lys Gly Tyr Cys Ala Ala Leu Tyr Glu Gly Leu Arg
65 70 75 80

Cys Cys Pro His Glu Arg His He His Val Cys Cys Glu Thr Asp Phe
85 90 95

lle Ala His Leu Leu Gly Arg Ala Glu Pro Glu Phe Ala Gly Gly Arg 100 105 110 Arg Glu Arg His Ala Lys Thr lle Asp Ile Ala Gln Glu Glu Val Leu Thr Cys Leu Gly 11e His Leu Tyr Glu Arg Leu His Arg 11e Trp Gln 135 140 Lys Leu Arg Ala Glu Glu Gln Thr Trp Gln Met Leu Phe Tyr Leu Gly 155 145 150 Val Asp Ala Leu Arg Lys Ser Phe Glu Met Thr Val Glu Lys Val Gln 170 165 Gly Ile Ser Arg Leu Glu Gln Leu Cys Glu Glu Phe Ser Glu Glu Glu 180 190 185 Arg Val Arg Glu Leu Lys Gln Glu Lys Lys Arg Gln Lys Arg Lys Asn 200 205 Arg Arg Lys Asn Lys Cys Val Cys Asp 11e Pro Thr Pro Leu Gln Thr 215 220 Ala Asp Glu Lys Glu Val Ser Gln Glu Lys Glu Thr Asp Phe Ile Glu 225 230 235 Asn Ser Ser Cys Lys Ala Cys Gly Ser Thr Glu Asp Gly Asn Thr Cys 250 245 Val Glu Val Ile Val Thr Asn Glu Asn Thr Ser Cys Thr Cys Pro Ser 260 265 270 Ser Gly Asn Leu Leu Gly Ser Pro Lys 11e Lys Lys Gly Leu Ser Pro 280 285 His Cys Asn Gly Ser Asp Cys Gly Tyr Ser Ser Ser Met 290 295 300

<210> 3584

<211> 321

<212> PRT

<213> Homo sapiens

<400> 3584

Met Ser Val Gln Glu Ala Gly Ala Thr Ser Pro Pro Ala Arg He Leu

1 5 10 15

Lys Glu Pro Gly Pro Ala Gln Pro Leu Ser Ala Gly Pro Glu Trp Asp

20 25 30

Arg	Gly	Arg	Gly	Val	Arg	Arg	Arg	Cys	G1 y	Pro	G1 y	Val	Leu	Leu	Gly
		35					40					45			
Ala	Ser 50	Ser	Val	Ser	Trp	Gly 55	Leu	Ala	Thr	Ser	G1y 60	His	Gln	Gly	Arg
Gly	Cys	Gly	Asp	Gly	Gly	Gly	Ala	Arg	Val	Pro	Thr	Lys	Ser	Val	Pro
65					70					75					80
Gly	Gly	Gly	Pro	Arg	Ala	Ser	Arg	Ser	Val	Arg	Glu	Val	Ala	Gly	Gly
				85					90					95	
Gly	Phe	Ala	Cys	Asn	Pro	Gly	Lys	Gly	Pro	Ala	Ala	Val	Arg	Leu	Ala
			100					105					110		
Leu	Gly	Gly	Gly	Trp	Lys	He	Ser	Lys	Ser	Pro	He	Pro	Val	Gln	Met
		115					120					125			
Ala	Ala	Gly	Ala	Ala	Gly	Cys	Arg	Thr	Gln	Ala	Arg	Gly	Gln	Arg	Leu
	130					135					140				
Thr	Ser	Arg	Gly	Arg	Glu	Ser	Pro	Glu	Ala	Thr	Gly	Val	Pro	G1u	Arg
145					150					155					160
Arg	Gly	Asp	Pro	Glu	Thr	Arg	Arg	Asn	Arg	Lys	Ser	Leu	Thr	Pro	Gly
				165					170					175	
Ser	G1 y	Glu		Gly	Va1	Arg	Ser		Ser	Cys	Asp	Ser	Thr	Val	Pro
			180					185					190		
Glu	Ser		Glu	Arg	Ala	Leu		Ala	Gln	Ser	Ser		Leu	Ala	Gly
		195					200					205			_
G1 y		Gly	Leu	Ala	Pro	Arg	Pro	GI y	Ala	Ser		Arg	G} y	Arg	Trp
	210		15	,	15	215	,	61	771	6.1	220	131	121	0	
	Ser	AJa	Pro	Leu		Pro	Lys	Gly	Ihr		Thr	Phe	Phe	Cys	
225	D	C	A 1 -	1	230	11.	۸1.	1	C	235	C1	D	C	Т	240
Leu	rro	ser	мта		Arg	Ala	Ala	Leu	250	Cys	СГУ	110	ser		61 y
C1	Aon	Con	Cly	245	Ana	His	Ara	Clu		A 2- cr	Dro	Acn	Dro	255	San
Giu	veh	261	260	110	AI g	1112	A1 g	265	Leu	Alg	110	ush	270	nsp	361
Ara	Ara	Δla		Ala	Glu	Arg	Sor		Ara	Cve	Pro	Pro		Sor	Pro
Мg	Mg	275	261	Mia	Olu	nı g	280	110	Mg	Cis	110	285	Oli	561	110
Aro	lvs		Glv	Pro	Glv	Arg		Asn	Ala	Aro	GLv		Ala	Leu	Glv
5	290		~.,	0	~.;	295	5			5	300			u	J.,
Glv		Phe	Arø	Val	Leu	Ala	Glv	Arg	Ala	Leu		Arg	Arg	G1 v	Met.
305					310					315		G	٠		320

Glu

<210> 3585

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<211> 278
<212> PRT
<213> Homo sapiens
<400> 3585
Met Ser His Leu Pro Thr Ala Pro Arg Val Leu Phe Gln Leu Pro Ala
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lle His Ser Pro Thr Pro Leu Gly Pro Gln Leu Arg Leu Glu Pro Asp
                                 25
Asn Trp Arg Ser Gln Gln Asp Ser Glu Val Ser Glu Ser Ser Ala Pro
         35
                             40
                                                  45
Asp Gly Pro Gly Ser Ala Met Trp Ser Gln His Gly Leu Trp Tyr Leu
                         55
Val Ala Ala Phe Leu Leu Arg Trp Ala Pro Val Lys Thr Arg Val Met
                                          75
 65
                     70
                                                              80
Val Asp Gly Ser Pro Met Thr Met Glu Lys Ala Leu Lys His Phe Glu
                 85
                                      90
Ala Gln Ser Thr Glu Lys Glu Arg Ala Phe Ala Gly Arg Val Gly Trp
                                105
Ala Phe Leu Thr Val Leu Gln Glu Val His Thr Gln Ser Leu Arg Asp
        115
                            120
                                                 125
Thr Ala Gln Val Arg Asp Leu Gln Gly Gln Ala Glu Arg Leu Glu 11e
                        135
                                             140
Arg Thr Tyr Ser Leu Lys Arg Glu Leu Gly Pro Ala Thr Ser Val Gly
                    150
                                         155
                                                             160
145
Leu Gly Gln Pro Ser Gln Ser Glu Thr Pro Ala Arg Ser Asp Thr Lys
                165
                                     170
Glu Glu Glu Pro Pro Leu Gln Ala His Pro Val Val Arg Gln Lys 11e
            180
                                185
                                                     190
Glu Gln Glu Gln Pro Leu Gly Pro Gln Gly Val Gly Val Gln Gly Pro
        195
                            200
                                                 205
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 Pro
 Thr
 Val
 Val
 Glu
 His
 Met
 Ser
 Tyr
 Ser
 Ala
 Tyr
 Thr
 Pro
 Thr
 Asp

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<210> 3586

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3586

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65 70 75 80

Gln Tyr lle Asn Phe Arg Gly Trp Pro Gln Asp Leu Gln Gln Gly Ser 85 90 95

Val Phe Leu Cys Leu Thr Leu Gln Gly Phe Arg Gly Gln Gly Val Ser 100 105 110

Ser Asn Met Arg Val Arg Gly Trp 115 120

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<210> 3587
<211> 499
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Met Thr Glu Glu Ser Ser Asp Val Pro Arg Glu Leu 11e Glu Ser 11e
                                     10
Lys Asp Val Ile Gly Arg Lys Ile Lys Ile Ser Val Lys Lys Val
             20
                                 25
                                                      30
Lys Leu Glu Val Lys Gly Asp Lys Val Glu Asn Lys Val Leu Val Leu
                             40
Thr Ser Cys Arg Ala Phe Leu Val Thr Ala Arg Ile Pro Thr Lys Leu
                         55
                                              60
Glu Leu Thr Phe Ser Tyr Leu Glu Ile His Gly Val Val Cys Ser Lys
65
                     70
                                          75
Ser Ala Gln Met Ile Val Glu Thr Glu Lys Cys Ser Ile Ser Met Lys
                                      90
Met Ala Ser Pro Glu Asp Val Ser Glu Val Leu Ala His Ile Gly Thr
            100
                                105
                                                     110
Cys Leu Arg Lys Ile Phe Pro Gly Leu Ser Pro Val Arg Ile Met Lys
        115
                            120
                                                 125
Lys Val Ser Met Glu Pro Ser Glu Arg Leu Ala Ser Leu Gln Ala Leu
                        135
Trp Asp Ser Gln Thr Val Ala Glu Gln Gly Pro Cys Gly Gly Phe Ser
145
                    150
                                         155
Gln Met Tyr Ala Cys Val Cys Asp Trp Leu Gly Phe Ser Tyr Arg Glu
                                     170
                165
                                                         175
Glu Val Gln Trp Asp Val Asp Thr lle Tyr Leu Thr Gln Asp Thr Arg
                                                     190
            180
                                 185
Glu Leu Asn Leu Gln Asp Phe Ser His Leu Asp His Arg Asp Leu Ile
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Pro Ile Ile Ala Ala Leu Glu Tyr Asn Gln Trp Phe Thr Lys Leu Ser 210 215 220 Ser Lys Asp Leu Lys Leu Ser Thr Asp Val Cys Glu Gln Ile Leu Arg

200

225					230					235					240
Val	Val	Ser	Arg	Ser	Asn	Arg	Leu	Glu	Glu	Leu	Val	Leu	Glu	Asn	Ala
				245					250					255	
Gly	Leu	Arg	Thr	Лsp	Phe	Ala	Gln	Lys	Leu	Ala	Ser	Ala	Leu	Ala	His
			260					265					270		
Asn	Pro	Asn	Ser	Gly	Leu	His	Thr	Ile	Asn	Leu	Ala	Gly	Asn	Pro	Leu
		275					280					285			
Glu	Asp	Arg	Gly	Val	Ser	Ser	Leu	Ser	He	Gln	Phe	Ala	Lys	Leu	Pro
	290					295					300				
Lys	Gly	Leu	Lys	His	Leu	Asn	Leu	Ser	Lys	Thr	Ser	Leu	Ser	Pro	Lys
305					310					315					320
Gly	Val	Asn	Ser	Leu	Ser	Gln	Ser	Leu	Ser	Ala	Asn	Pro	Leu	Thr	Ala
				325					330					335	
Ser	Thr	Leu	Val	His	Leu	Asp	Leu	Ser	Gly	Asn	Val	Leu	Arg	Gly	Asp
			340					345					350		
Asp	Leu	Ser	His	Met	Tyr	Asn	Phe	Leu	Ala	Gln	Pro	Asn	Ala	lle	Val
		355					360					365			
His	Leu	Asp	Leu	Ser	Asn	Thr	Glu	Cys	Ser	Leu	Asp	Met	Val	Cys	Gly
	370					375					380				
Ala	Leu	Leu	Arg	Gly	Cys	Leu	Gln	Tyr	Leu	Ala	Val	Leu	Asn	Leu	Ser
385					390					395					400
Arg	Thr	Va]	Phe	Ser	His	Arg	Lys	Gly	Lys	Glu	Val	Pro	Pro	Ser	Phe
				405					410					415	
Lys	Gln	Phe	Phe	Ser	Ser	Ser	Leu	Ala	Leu	Met	His	lle	Asn	Leu	Ser
			420					425					430		
Gly	Thr	Lys	Leu	Ser	Pro	Glu	Pro	Leu	Lys	Ala	Leu	Leu	Leu	Gly	Leu
		435					440					445			
Ala	Cys	Asn	His	Asn	Leu	Lys	Gly	Va]	Ser	Leu	Asp	Leu	Ser	Asn	Cys
	450					455					460				
G]u	Leu	Arg	Ser	Gly	Gly	Ala	Gln	Va]	Leu	Glu	Gly	Cys	Пe	Ala	Glu
465					470					475					480
He	His	Asn	lle	Thr	Gln	Leu	Gly	Thr	Arg	Tyr	Arg	Asn	Ala	Va]	Leu
				485					490					495	
Arg	Val	Tyr													

<210> 3588 <211> 131 <212> PRT <213> Homo sapiens <400> 3588 Met Leu Leu Phe Asn Trp Ile Cys Ile Val Ile Thr Gly Leu Ala Met 10 15 Asp Met Gln Leu Leu Met Ile Pro Leu Ile Met Ser Val Leu Tyr Val 25 30 20 Trp Ala Gln Leu Asn Arg Asp Met Ile Val Ser Phe Trp Phe Gly Thr 40 Arg Phe Lys Ala Cys Tyr Leu Pro Trp Val 11e Leu Gly Phe Asn Tyr 50 . 55 Ile Ile Gly Gly Ser Tyr Pro Met Asp Leu Gly Gly Arg Asn Phe Leu 75 70 Ser Thr Pro Gln Phe Leu Tyr Arg Trp Leu Pro Ser Arg Arg Gly Gly 90 85 Val Ser Gly Phe Gly Val Pro Pro Ala Ser Met Arg Arg Ala Ala Asp 100 105 110 Gln Asn Gly Gly Gly Gly Arg His Asn Trp Gly Gln Gly Phe Arg Leu 125 120 Gly Asp Gln 130 <210> 3589 <211> 352 <212> PRT <213> Homo sapiens

Met His Thr Gln Pro Leu Lys Glu Ala Lys Arg Met Pro Asp Arg Pro

lle Lys Trp Asp Lys Ser Tyr Tyr Ser Phe Thr Gly Phe Lys Asp Pro

10

15

5

<400> 3589

Asp	Glu	Asp	Leu	Glu	Gln	Val	Ser	Arg	Val	Glu	Thr	Thr	Leu	Thr	Ser
		35					40					45			
Trp	Leu	Asp	Asn	Asn	Gly	Lys	Ser	Ala	Val	Lys	Lys	Leu	Lys	Asn	Ser
	50					55					60				
Leu	Pro	Leu	Arg	Lys	Glu	Leu	Asp	Arg	Leu	Lys	Asp	Glu	Leu	Ser	His
65					70					75					80
Gln	Leu	Gln	Leu	Ser	Asp	He	Arg	Trp	Gln	Arg	Ser	Trp	Gly	Ile	Ala
				85					90					95	
His	Arg	Cys	Ser	Gln	Leu	His	Ser	Leu	Ser	Arg	Leu	Ala	Gln	Gln	Asn
			100					105					110		
Leu	Glu	Thr	Leu	Lys	Lys	Ala	Lys	Gly	Cys	Thr	lle	Ile	Phe	Thr	Asp
		115					120					125			
Arg	Ser	Gly	Met	Ser	Ala	Val	Gly	His	Val	Met	Leu	Gly	Thr	Met	Asp
	130					135					140				
Val	His	His	His	Trp	Thr	Lys	Leu	Phe	Glu	Arg	Leu	Pro	Ser	Tyr	Phe
145					150					155					160
Asp	Lėu	Gln	Arg	Arg	Leu	Met	lle	Leu	Glu	Asp	Gln	Ile	Ser	Tyr	Leu
				165					170					175	
Leu	Gly	Gly	Пе	Gln	Val	Val	Tyr	He	Glu	Glu	Leu	G1n	Pro	Va1	Leu
			180					185					190		
Thr	Leu	Glu	Glu	Tyr	Tyr	Ser	Leu	Leu	Asp	Val	Phe	Tyr	Asn	Arg	Leu
		195					200					205			
Leu	Lys	Ser	Arg	He	Leu	Phe	His	Pro	Arg	Ser	Leu	Arg	Gly	Leu	Gln
	210					215					220				
Met	lle	Leu	Asn	Ser	Asp	Arg	Tyr	Ala	Pro	Ser	Leu	His	Glu	Leu	Gly
225					230					235					240
	Phe	Asn	11e	Pro		Leu	Cys	Asp	Pro		Asn	Leu	Gln	Trp	Phe
				245			•	•	250					255	
He	Leu	Thr	Lys	Ala	G]n	Gln	Ala	Arg	Glu	Asn	Met	Lys	Arg	Lys	Glu
			260					265					270	-	
Glu	Leu	Lys	Val	He	Glu	Asn	Glu		lle	Gln	Ala	Ser		Lvs	Lvs
		275					280					285		, -	•
Phe	Ser		Glu	Lvs	Leu	Tvr		Glu	Pro	Ser	lle		Ser	lle	Gln
	290			•		295	•				300				

 Met Val Asp Cys Cys Lys Arg Leu Leu Glu Gln Ser Leu Pro Tyr Leu

 305
 310
 315
 320

 His Gly Met His Leu Cys Ile Ser His Phe Tyr Ser Val Met Gln Asp
 333
 335

 Gly Asp Leu Cys Ile Pro Trp Asn Trp Lys Asn Gly Glu Ala Ile Lys
 340

<210> 3590

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3590

Met Ala Ala Ala Pro Asp Tyr Pro Ala Pro Phe Tyr Pro Ser Ser Gly

1 5 10 15

Arg Asn Pro Ser Pro Arg Pro Phe Pro Leu Lys Gly Asn Gly Pro Lys
20 25 30

Val Gly Arg Ala Ala Arg Leu Pro Arg Ser Ile Gln Val Lys Arg Glu 35 40 45

Ser Asp Gln Thr Gly Glu Pro Arg Gly Pro Ile Phe Arg Asp Leu Thr 50 55 60

Gly His Leu Asp Arg Pro Leu Gln Leu Gly Thr Phe Gln Glu Asn Glu 65 70 75 80

Gly Asn Val Val 11e Ala Pro Glu Pro His Ser Ser Ser Glu Val Leu 85 90 95

Phe Thr Ser Leu Trp Lys Lys lle Gly Tyr Leu Phe Leu Val Glu Arg 100 105 110

Val Glu lle

115

<210> 3591

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3591 Met 11e Ser Ser Arg Met Pro Cys Leu Leu Val Leu Asn Ser Val Ser 5 10 15 Phe Pro Leu Phe Leu Ala Val Tyr Tyr Trp Pro Ala Ser Leu Asp Gly 20 25 Ala Ala Gly Met Val Gln Ile Asn Glu Gly His Thr Lys Val Ile Leu 40 Leu Lys Ala His Val Gly Leu Arg Pro Glu Leu Thr Asp Thr Glu Met 50 55 60 Ser Leu Ile Leu Cys Leu Phe His Cys Leu Trp Tyr Tyr Ser Ala Phe 70 75 Thr Glu Glu Arg Val Leu Gly Asn Arg Asn Thr Arg Ile lle Leu Val 90 Gln Gln Leu Leu Ala Thr Pro Lys Phe Thr Tyr Phe Leu Pro Pro Ala 100 105 110 Phe Phe Ile Asp Leu Ala Ala Ser Glu Ile Phe Ala Ala Ser Gln 115 120 125

<210> 3592

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3592

Met His Gly Ser Lys Trp Leu Asp Ser Trp Val Gly Trp Gly Ser Gln
1 5 10 15

Ser Arg Leu Pro Glu Gly Leu Glu Val Thr Pro Pro Gly Gly Asp Gly
20 25 30

Ser Ser Gln Val Gly Cys His Gln Ser Arg Gln His Cys Leu Leu Gly
35 40 45

Thr Pro Gly Glu Ala Asp Arg Val Ser Gly Phe Gln Leu Gly Gly Ser 50 55 60

Pro Ala Glu Asn Pro Val Lys Pro Ala Phe His Ser Ser Pro Val Cys 65 70 75 80 Pro Glu Pro Gly Leu Arg Ala Ala Leu Cys Met Pro Ala Leu Pro Thr Trp Gln Ser Ser Gly Gly Arg Thr Pro Arg Leu Ser Gly Asp Ser Gln 105 110 Ala Asn Val Ser 11e Pro Gly Ser Ala Leu Ser Cys His Glu Phe Arg 115 120 Lys Ala Glu Ala Ala Gln Gln Met Gly Thr Arg Gly Arg Thr Ala Ile 135 140 His Ser Leu Ser Ser His Pro Gln Ala Cys Arg Ala Pro Gly Leu Trp 160 145 150 155 Cys

<210> 3593

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3593

Met Pro Leu Gly Ala Gly Gly Leu Gly Arg Leu Ala Arg Gly Leu Thr

1 5 10 15

Ser Gly Val Glu Gly Asn Gly Ile Lys Ala Thr Glu Phe Pro Gly Pro 20 25 30

Gly Pro Glu Arg Tyr Pro Cys Leu His Leu Ala Leu Pro Cys Ala Trp 35 40 45

Leu Ser Pro Ser Ser Trp Ala His Ser His Val Pro Pro lle Thr Arg
50 55 60

His Leu His Phe Cys Trp Cys Phe Trp Glu Ser Asp Leu Gln Thr Ala 65 70 75 80

Ser Ala Ser Pro Gly Ser Leu Leu Ser Gly Ala Phe Ser Arg Thr Val 85 90 95

Lys Gln Thr Leu Gly Ala Arg Pro Arg Asp Pro His Phe Lys Tyr Lys 100 105 110

Val

<210> 3594 <211> 100 <212> PRT <213> Homo sapiens <400> 3594 Met Gln Val Val Arg Glu Val Gly Glu Ser Gln Gln Ser Gln Ala Ser 5 10 15 Pro Ser Ser His Ala Ile Gln Arg Ala Ile Leu Thr Pro Thr Val Pro 25 Pro Leu Cys Asn Ser Thr Glu Ser Val Phe Arg Gln Trp Thr Ser Arg 45 40 Ala Glu Asn Leu Pro His Val Thr His Leu Pro Ala Ala Val Glu Lys 50 55 60 Gly Phe Ser Ser Ser Cys Thr Cys Gly Val Tyr Met Pro Asp Met Cys 70 75 Pro Pro Leu Ser Ser Gly Gln Glu Ala Ser Gln Pro Val Gln Ile Val 85 90 95 Thr Lys Phe Ser 100 <210> 3595 <211> 418 <212> PRT <213> Homo sapiens <400> 3595 Met Leu Glu Asn His 11e Leu His Lys Arg 11e Tyr 11e Leu Thr Phe Phe Ser Gln Gln lle Phe lle Leu Cys His Ala His Phe lle Phe Phe 20 25 30 Phe Thr Val Arg Asp Phe Cys Arg Gln Asp Glu Lys Cys Asp Tyr Tyr

40

45

Phe	Ser	Val	Asp	Ala	Asp	Val	Val	Leu	Thr	Asn	Pro	Arg	Thr	Leu	Lys
	50					55					60				
He	Leu	He	Glu	Gln	Asn	Arg	Lys	lle	Пе	Ala	Pro	Leu	Val	Thr	Arg
65					70					75					80
His	Gly	Lys	Leu	Trp	Ser	Asn	Phe	Trp	G1 y	Ala	Leu	Ser	Pro	Asp	Gly
				85					90					95	
Tyr	Tyr	Ala	Arg	Ser	Glu	Asp	Tyr	Val	Asp	He	Val	Gln	Gly	Asn	۸rg
			100					105					110		
Val	Gly	Val	Trp	Asn	Val	Pro	Tyr	Met	Ala	Asn	Val	Tyr	Leu	lle	Lys
		115					120					125			
Gly	Lys	Thr	Leu	Arg	Ser	Glu	Met	Asn	Glu	Arg	Asn	Tyr	Phe	Val	Arg
	130					135					140				
Asp	Lys	Leu	Asp	Pro	Asp	Met	Ala	Leu	Cys	Arg	Asn	Ala	Arg	Glu	Met
145					150					155					160
Thr	Leu	Gln	Arg	Glu	Lys	Asp	Ser	Pro	Thr	Pro	Glu	Thr	Phe	G]n	Met
				165					170					175	
Leu	Ser	Pro	Pro	Lys	Gly	Val	Phe	Met	Tyr	lle	Ser	Asn	Arg	His	Glu
			180					185					190		
Phe	Gly	Arg	Leu	Leu	Ser	Thr		Asn	Tyr	Asn	Thr		His	Tyr	Asn
		195					200					205			
Asn		Leu	Trp	Gln	He		Glu	Asn	Pro	Val		Trp	Lys	Glu	Lys
	210					215					220				
	He	Asn	Arg	Asp		Ser	Lys	He	Phe		Glu	Asn	He	Va]	
225		_			230					235		~	0.1		240
Gln	Pro	Cys	Pro		Val	Phe	Trp	Phe		He	Phe	Ser	Glu	Lys	Ala
_				245		0.1		0.1	250		0.1		æ	255	C I
Cys	Asp	Glu		Val	Glu	Glu	Met		His	lyr	Gly	Lys		Ser	GIy
0.1			260		C		7.1	265	C1.	C1.	т	C1	270	V - 1	D
61 y	Lys		HIS	Asp	Ser	Arg		Ser	61 y	61 y	ıyr		Asn	Va1	Pro
Tr.I		275	7.7	11.			280	V . 1	Δ	1	C1	285	V - 1	т	1
Ihr		Asp	Не	HIS	мет		GIN	vai	Asp	Leu		ASN	val	Trp	Leu
	290	3.1	1	C T	DI.	295	A 1 -	D	V = 1	Tl	300	1	V = 1	DI	A 1
	rne	116	Arg	ĢĮÜ		911.	W19	rro	val		Leu	Lys	vai	Phe	
305	т	Т	T1	I	310	DL ~	Λ1-	Lau	Lou	315	Dha	Val	Vol	Lvc	320
θŢŸ	1 ÿ.1°	тyr	ınr			rne	A18	Leu			гие	val	val	Lys	ı yı.
				325					330					335	

Ser Pro Glu Arg Gln Arg Ser Leu Arg Pro His His Asp Ala Ser Thr 340 345 Phe Thr lle Asn Ile Ala Leu Asn Asn Val Gly Glu Asp Phe Gln Gly 360 365 Gly Gly Cys Lys Phe Leu Arg Tyr Asn Cys Ser Ile Glu Ser Pro Arg 375 Lys Gly Trp Ser Phe Met His Pro Gly Arg Leu Thr His Leu His Glu 395 390 Gly Leu Pro Val Lys Asn Gly Thr Arg Tyr Ile Ala Val Ser Phe Ile 405 410 415 Asp Pro

<210> 3596

⟨211⟩ 223

<212> PRT

<213> Homo sapiens

<400> 3596

Met Pro Val Leu Pro Pro Cys Val Leu Gln Val Arg Asp Glu Gln His 5 10 Gln Cys Pro Leu Gly Asn Leu Lys Val Pro Leu Ser Gln Leu Leu Thr 25 Ser Glu Asp Met Thr Val Ser Gln Arg Phe Gln Leu Gly Asn Ser Gly 35 40 45 Pro Asn Ser Thr Ile Lys Met Lys Ile Ala Leu Arg Val Leu His Leu 55 Glu Lys Arg Glu Arg Pro Pro Asp His Gln His Ser Ala Gln Val Lys 75 65 70 80 Arg Pro Ser Val Ser Lys Glu Gly Arg Lys Thr Ser Ile Lys Ser His 90 85 Met Ser Gly Ser Pro Gly Pro Gly Gly Ser Asn Thr Ala Pro Ser Thr

Pro Val 11e Gly Gly Ser Asp Lys Pro Gly Met Glu Glu Lys Ala Gln 115 120 125

Pro Pro Glu Ala Gly Pro Gln Gly Leu His Asp Leu Gly Arg Ser Ser Ser Ser Leu Leu Ala Ser Pro Gly His Ile Ser Val Lys Glu Pro Thr Pro Ser lle Ala Ser Asp Ile Ser Leu Pro Ile Ala Thr Gln Glu Leu Arg Gln Arg Leu Arg Gln Leu Glu Asn Gly Thr Thr Leu Gly Gln Ser Pro Leu Gly Gln Ile Gln Leu Thr Ile Gln His Ser Ser Gln Lys Gln Ala Tyr Arg Gly Arg Ala Cys Leu Gln Lys Pro His Cys Leu Leu

<210> 3597

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3597

Met Asp Trp Thr Trp Arg Val Leu Cys Val Leu Ala Val Ala Pro Gly Ala Arg Leu Gln Val Gln Leu Thr Gln Ser Gly Ala Ala Leu Lys Lys Pro Gly Ala Ser Leu Lys Leu Ser Cys Arg Ala Ser Ala Asp Ser Ser lle Thr Tyr Asn lle His Trp Leu Arg Arg Pro Pro Gly Gln Gly Phe Glu Trp Leu Gly Lys lle Asn Ser Arg Asp Ser lle Thr Asn Ser Ala Pro Arg Phe Gln Gly Ser Val Thr Met Thr Arg Asp Arg Ser Ser Ser Thr Phe Tyr Leu Asp Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Thr Arg Ser 11e Trp Pro Leu Asp Tyr Phe Asp Ser Trp

Gly Gln Gly Thr Gln Val Thr Val Ser Pro Ala Pro Thr Lys Ala Pro 135 Asp Val Phe Pro Ile Ile Ser Gly Cys Arg His Pro Lys Asp Asn Ser 150 155 Pro Val Val Leu Ala Cys Leu Ile Thr Gly Tyr His Pro Thr Ser Val 165 170 Thr Val Thr Trp Tyr Met Gly Thr Gln Ser Gln Pro Gln Arg Thr Phe 185 Pro Glu lle Gln Arg Arg Asp Ser Tyr Tyr Met Thr Ser Ser Gln Leu 195 200 205 Ser Thr Pro Leu Gln Gln Trp Arg Gln Gly Glu Tyr Lys Cys Val Val 215 220 Gln His Thr Ala Ser Lys Ser Lys Lys Glu lle Phe Arg Trp Pro Glu 230 235 240 Ser Pro Lys Ala Gln Ala Ser Ser Val Pro Thr Ala Gln Pro Gln Ala 245 250 Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro Ala Thr Thr Arg Asn 260 265 Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys Glu Lys Glu Lys Glu Glu 275 280 285 Gln Glu Glu Arg Glu Thr Lys Thr Gln Ser Val Arg Ala Thr Pro Ser 290 295 300 Leu Leu Ala Ser Thr Cys 305 310

<210> 3598

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3598

Met Pro Thr Thr Pro Val Lys Ala Lys Arg Val Ser Thr Phe Gln Glu

1 5 10 15

Phe Glu Ser Asn Thr Ser Asp Ala Trp Asp Ala Gly Glu Asp Asp Asp

20 25 30

Glu	Leu	Leu	Ala	Met	Ala	Ala	Glu	Ser	Leu	Asn	Ser	Glu	Val	Val	Met
		35					40					45			
G1u	Thr 50	Λla	Asn	Arg	Val	Leu 55	Arg	Asn	His	Ser	Gln 60	Arg	Gln	Gly	Arg
Pro 65	Thr	Leu	Gln	Glu	Gly 70	Pro	Gly	Leu	Gln	Gln 75	Lys	Pro	Arg	Pro	61u 80
Ala	Glu	Pro	Pro	Ser 85	Pro	Pro	Ser	G1 y	Аsp 90	Leu	Arg	Leu	Va]	Lys 95	Ser
Val	Ser	Glu	Ser 100	His	Thr	Ser	Cys	Pro 105	Ala	Glu	Ser	Ala	Ser 110	Asp	Ala
Ala	Pro	Leu 115	Gln	Arg	Ser	Gln	Ser 120	Leu	Pro	His	Ser	Ala 125	Thr	Val	Thr
Leu	Gly 130	G1y	Thr	Ser	Asp	Pro 135	Ser	Thr	Leu	Ser	Ser 140	Ser	Ala	Leu	Ser
Glu 145	Arg	Glu	Ala	Ser	Arg 150	Leu	Asp	Lys	Phe	Lys 155	Gln	Leu	Leu	Ala	Gly 160
Pro	Asn	Thr	Asp	Leu 165	Glu	Glu	Leu	Arg	Arg 170	Leu	Ser	Trp	Ser	Gly 175	lle
Pro _.	Lys	Pro	Val 180	Arg	Pro	Met	Thr	Trp 185	Lys	Leu	Leu	Ser	Gly 190	Tyr	Leu
Pro	Λla	Asn 195	Val	Лѕр	Arg	Arg	Pro 200	Ala	Thr	Leu	Gln	Arg 205	Lys	G1n	Lys
Glu	Tyr 210	Phe	Ala	Phe	Ile	Glu 215	His	Tyr	Tyr	Asp	Se.r 220	Arg	Asn	Asp	Glu
Val 225	His	Gln	Asp	Thr	Tyr 230	Arg	Gln	lle	His	11e 235	Asp	He	Pro	Arg	Met 240
Ser	Pro	Glu	Ala	Leu 245	He	Leu	Gln	Pro	Lys 250	Val	Thr	Glu	lle	Phe 255	Glu
Arg	He	Leu	Phe 260	lle	Trp	Ala	lle	Arg 265	His	Pro	Ala	Ser	G1y 270	Tyr	Val
Gln	Gly	11e 275	Asn	Asp	Leu	Va]	Thr 280	Pro	Phe	Phe	Val	Val 285	Phe	He	Cys
Glu	Tyr 290	lle	Ala	Phe	Pro	Gly 295	Cys	Gly	Arg	Pro	G1n 300	He	Pro	He	Leu
Ala	Val	Ha	Tro	Ara	Aen	61n	Pro	Tyr	Pro	Ara	The	Aen	610	G1n	110

305 310 315 320

Ile Leu Arg Arg

<210> 3599

<211> 407

<212> PRT

<213> Homo sapiens

<400> 3599

Met Asn Met 11e Trp Arg Asn Ser 11e Ser Cys Leu Arg Leu Gly Lys

1 5 10 15

Val Pro His Arg Tyr Gln Ser Gly Tyr His Pro Val Ala Pro Leu Gly
20 25 30

Ser Arg 11e Leu Thr Asp Pro Ala Lys Val Phe Glu His Asn Met Trp 35 40 45

Asp His Met Gln Trp Ser Lys Glu Glu Glu Ala Ala Ala Arg Lys Lys
50 55 60

Val Lys Glu Asn Ser Ala Val Arg Val Leu Leu Glu Glu Gln Val Lys
65 70 75 80

Tyr Glu Arg Glu Ala Ser Lys Tyr Trp Asp Thr Phe Tyr Lys Ile His
85 90 95

Lys Asn Lys Phe Phe Lys Asp Arg Asn Trp Leu Leu Arg Glu Phe Pro 100 105 110

Glu Ile Leu Pro Val Asp Gln Lys Pro Glu Glu Lys Ala Arg Glu Ser 115 120 125

Ser Trp Asp His Val Lys Thr Ser Ala Thr Asn Arg Phe Ser Arg Met 130 135 140

His Cys Pro Thr Val Pro Asp Glu Lys Asn His Tyr Glu Lys Ser Ser

145 150 155 160 Gly Ser Ser Glu Gly Gln Ser Lys Thr Glu Ser Asp Phe Ser Asn Leu

165 170 175

Asp Ser Glu Lys His Lys Lys Gly Pro Met Glu Thr Gly Leu Phe Pro 180 185 190

Gly Ser Asn Ala Thr Phe Arg Ile Leu Glu Val Gly Cys Gly Ala Gly

		195					200					205			
Asn	Ser	Val	Phe	Pro	Ile	Leu	Asn	Thr	Leu	Glu	Asn	Ser	Pro	Glu	Ser
	210					215					220				
Phe	Leu	Tyr	Cys	Cys	Asp	Phe	Ala	Ser	Gly	Ala	Val	Glu	Leu	Val	Lys
225					230					235					240
Ser	His	Ser	Ser	Tyr	Arg	Ala	Thr	Gln	Cys	Phe	Ala	Phe	Val	His	Asp
				245					250					255	
Val	Cys	Asp	Asp	Gly	Leu	Pro	Tyr	Pro	Phe	Pro	Asp	Gly	Ile	Leu	Asp
			260					265					270		
Val	Ile	Leu	Leu	Val	Phe	Val	Leu	Ser	Ser	Ile	His	Pro	Asp	Arg	Met
		275					280					285			
Gln	Gly	Val	Val	Asn	Arg	Leu	Ser	Lys	Leu	Leu	Lys	Pro	Gly	Gly	Met
	290					295					300				
Leu	Leu	Phe	Arg	Asp	Tyr	Gly	Arg	Tyr	Asp	Lys	Thr	Gln	Leu	Arg	Phe
305					310					315					320
Lys	Lys	Gly	His	Cys	Leu	Ser	Glu	Asn	Phe	Tyr	Val	Arg	Gly	Asp	G1 y
				325					330					335	
Thr	Arg	Ala	Tyr	Phe	Phe	Thr	Lys	Gly	Glu	Val	His	Ser	Met	Phe	Cys
			340					345					350		
Lys	Ala	Ser	Leu	Asp	Glu	Lys	Gln	Asn	Leu	Va]	Asp	Arg	Arg	Leu	Gln
		355					360					365			
Val	Asn	Arg	Lys	Lys	Gln	Val	Lys	Met	His	Arg	Val	Trp	He	Gln	Gly
	370					375					380				
Lys	Phe	Gln	Lys	Pro	Leu	His	Gln	Thr	Gln	Asn	Ser	Ser	Asn	Met	Val
385					390					395					400
Ser	Thr	Leu	Leu	Ser	Gln	Asp									
				405											

<210> 3600

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3600

 $\hbox{Met Val Cys Pro Glu Phe Val Pro Ser Asp Val Gln Met Cys Leu Glu}\\$

Phe Leu Pro Ser Gly Gly Phe Val Val Ser Leu Asp Phe Arg Ser Glu Ala Thr Glu Leu Cys Ser Val Thr Ala Leu Lys Gly Ala Arg Leu Glu Leu Leu Val Pro Pro Asp Gly Phe Val Ala Leu Leu Thr Ser Gly Met Lys Pro Gln Thr Leu Thr Val Ser Val Thr Ala His Lys Gly Ser Ala Asp Pro Glu Glu Ala Ala Ala Lys Phe Ile Val Lys Ser Lys Arg Thr Lys Leu Pro Gln His Glu Thr Ala Pro Gln Arg lle Ala Thr Ala Ala Trp Val Ala Ser Phe Tyr Ser Leu Thr Trp Pro His Pro His Pro Ala Asp Trp Ser Ile Leu Gln Arg Gly Asp Trp Ser Val Phe Thr Gln Cys

<210> 3601

<211> 150

<212> PRT

<213> Homo sapiens

<400> 3601

Met Gln Ser Leu Pro Thr Ala Pro Ser Phe Gly Val Ser Thr Gly Leu Leu Ala Ala Ala Ala Phe Tyr Gln Thr Ser Gln Pro Pro Ser Pro Pro Leu Gly Ser Ser Ser Pro Thr Trp Pro Ala Arg Val Thr Leu Lys Tyr Lys Ser Asp Pro Asn Thr Ser Leu Leu Lys Thr His Gln Val Leu Pro Pro His Ser Met Gln Cys Lys Ser Ser Pro Trp Ser Ser Ser Ile Ser Pro Ser Pro Ser Ala Ser Ser Leu Pro His Leu Leu Ser Ser Tyr

Thr Gly Leu Cys Cys Thr Trp Asp Met Pro Ser Lys Thr Gln Pro Trp Gly Leu Cys Ser Arg Pro Leu Pro Gly Cys Ser Ser Pro Ser Tyr Pro Gln Val Trp Leu Pro Asp Phe Ile Gln Arg Pro Pro Ser Gln Glu Asp Thr Leu Asp Cys Phe Val <210> 3602 ⟨211⟩ 163 <212> PRT <213> Homo sapiens <400> 3602 Met Gly Ser Ser Leu Gly Leu Cys Leu Gly Lys Ala Pro Ser Ser Ser Gln Leu Phe Leu Phe Phe Ala Met Gly Ser Asp Val Gln Pro Gly Thr Glu Met Glu Ile Val Val Glu Glu Thr Ile Ser Val Arg Asp Cys Leu Lys Leu Met Leu Lys Lys Ser Gly Leu Gln Gly Asp Ala Trp His Leu Arg Lys Met Asp Trp Cys Tyr Glu Ala Gly Glu Pro Leu Cys Glu Glu Asp Ala Thr Leu Lys Glu Leu Leu Ile Cys Ser Gly Asp Thr Leu Leu Leu Ile Glu Gly Gln Leu Pro Pro Leu Gly Phe Leu Lys Val Pro 11e Trp Trp Tyr Gln Leu Gln Gly Pro Ser Gly His Trp Glu Ser His Gln Asp Gln Thr Asn Cys Thr Ser Ser Trp Gly Arg Val Trp Arg Ala Thr

Ser Ser Gln Gly Glu Asn Arg Met Gly Phe Gln Gln Pro Val His His 145 150 155 160 Lys Glu Lys

<210> 3603

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3603

Met Val Thr Lys Trp Trp Gly Gln Asp Pro Pro Val Gln Leu Arg Ser

Gln Leu Met Leu Trp Ile Met Glu Leu Ile Leu Trp Lys Phe Gln Ser 20 25 30

Ser Val Val Gly Ser Ser Val Val Thr Trp Lys Ile Ser Asp Val Ala 35 40 45

Gly Pro His Gly Asp His Ser Cys Ser Leu Gln His Leu Glu Gln Ile 50 55 60

11e Gly Ser Val Ser Asn Tyr Pro Arg Tyr Thr Gly Ser Arg Ser Cys
65 70 75 80

Asp Arg Gly Glu Asn Pro Val Ser Leu Ser Lys Arg 11e Lys Cys Thr 85 90 95

Trp Met Leu Gly Ala Ser Gly Phe Pro Pro Arg Cys Pro Ser Gly Arg
100 105 110

Asp His Ser Arg Asp His Pro Gly Lys Ser Gln Val Pro Ala Leu Glu 115 120 125

Leu Ala Asn Gln Leu Ala Ala Trp Gly Leu Trp Ser Ser Val Val Lys 130 135 140

Ser Trp Gly Phe Arg Ala Gly Glu Thr Glu Ala Pro Ile Ser Ala Leu 145 150 155 160

Ser Ser Ala His Ala

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<210> 3604
<211> 107
<212> PRT
<213> Homo sapiens
<400> 3604
Met Val Ser Cys Asp Cys Gly Val Cys Glu Ser Arg Ser 11e Leu Val
                                     10
Leu Cys Ala Ser Leu Phe Ala Val Leu Gly Gly Leu Ala Arg Phe Arg
             20
                                  25
                                                      30
Ile Arg Gly Thr Gly Gly Leu Glu Arg Gly Met Arg Trp Pro Ser Arg
                             40
                                                  45
Ala Arg Arg Met Thr Ala Asn Trp Cys Leu Gly Gly Leu Ser Arg Arg
                         55
                                              60
Asn Cys Gly Ala Arg Ala Ala Leu Cys Pro Leu Pro Arg Ser Asn Leu
 65
                     70
                                          75
                                                              80
Trp Arg Pro Phe Thr Ala Leu Ala Leu Val Gly Ser Arg Gly Lys Glu
                                     90
Phe Gly Asn Val Trp Leu Cys Val Thr Met Lys
            100
                                 105
<210> 3605
<211> 402
<212> PRT
<213> Homo sapiens
<400> 3605
Met Cys Glu Leu Asp Ile Leu His Asp Ser Leu Tyr Gln Phe Cys Pro
 1
                  5
                                      10
                                                          15
Glu Leu His Leu Lys Arg Leu Asn Ser Leu Thr Leu Ala Cys His Ala
                                  25
Leu Leu Asp Cys Lys Thr Leu Thr Leu Thr Glu Leu Gly Arg Asn Leu
                                                  45
                              40
```

Pro Thr Lys Ala Arg Thr Lys His Asn Ile Lys Arg Ile Asp Arg Leu

60

55

Leu	Gly	Asn	Arg	His	Leu	His	Lys	Glu	Arg	Leu	Ala	Val	Tyr	Arg	Trp
65					70					75					80
His	Ala	Ser	Phe	lle	Cys	Ser	Gly	Asn	Thr	Met	Pro	He	Val	Leu	Val
				85					90					95	
Asp	Trp	Ser	Asp	lle	Arg	Glu	Gln	Lys	Arg	Leu	Met	Val	Leu	Arg	Ala
			100					105					110		
Ser	Val	Ala	Leu	His	Gly	Arg	Ser	Val	Thr	Leu	Tyr	Glu	Lys	Ala	Phe
		115					120					125			
Pro	Leu	Ser	Glu	Gln	Cys	Ser	Lys	Lys	Ala	His	Asp	Gln	Phe	Leu	Ala
	130					135					140				
Asp	Leu	Ala	Ser	He	Leu	Pro	Ser	Asn	Thr	Thr	Pro	Leu	He	Val	Ser
145					150					155					160
Asp	Ala	Gly	Phe	Lys	Va]	Pro	Trp	Tyr	Lys	Ser	Val	Glu	Lys	Leu	Gly
				165					170					175	
Trp	Tyr	Trp	Leu	Ser	Arg	Va]	Arg	Gly	Lys	Val	Gln	Tyr	Ala	Asp	Leu
			180					185					190		
Gly	Ala	Glu	Asn	Trp	Lys	Pro	He	Ser	Asn	Leu	His	Asp	Met	Ser	Ser
		195					200					205			
Ser	His	Ser	Lys	Thr	Leu	Gly	Tyr	Lys	Arg	Leu	Thr	Lys	Ser	Asn	Pro
	210					215					220				
11e	Ser	Cys	Gln	lle	Leu	Leu	Tyr	Lys	Ser	Arg	Ser	Lys	Gly	Arg	Lys
225					230					235					240
Asn	Gln	Arg	Ser	Thr	Arg	Thr	His	Cys	His	His	Pro	Ser	Pro	Lys	He
				245					250					255	
Tyr	Ser	Ala	Ser	Ala	Lys	Glu	Pro	Trp	Val	Leu	Ala	Thr	Asn	Leu	Pro
			260					265					270		
Val	Glu	lle	Arg	Thr	Pro	Lys	Gln	Leu	Val	Asn	lle	Tyr	Ser	Lys	Arg
		275					280					285			
Met	Gln	lle	Glu	Glu	Thr	Phe	Arg	Asp	Leu	Lys	Ser	Pro	Ala	Tyr	Gly
	290					295					300				
Leu	Gly	Leu	Arg	His	Ser	Arg	Thr	Ser	Ser	Ser	Glu	Arg	Phe	Asp	11e
305					310					315					320
Met	Leu	Leu	He	Ala	Leu	Met	Leu	GIn	Leu	Thr	Cys	Trp	Leu	Ala	Gly
				325					330					335	
Va]	His	Ala	Gln	Lys	Gln	Gly	Trp	Asp	Lys	His	Phe	Gln	Ala	Asn	Thr
			340					345					350		

 Val
 Arg
 Asn
 Arg
 Asn
 Val
 Leu
 Ser
 Thr
 Val
 Arg
 Leu
 Gly
 Met
 Glu
 Val

 Leu
 Arg
 His
 Ser
 Gly
 Tyr
 Thr
 1le
 Thr
 Arg
 Glu
 Asp
 Leu
 Leu
 Val
 Ala

 370
 370
 375
 375
 1eu
 Phe
 Thr
 His
 Gly
 Tyr
 Ala
 Leu
 Gly

 Ala
 Thr
 Leu
 Asp
 Leu
 Phe
 Thr
 His
 Gly
 Tyr
 Ala
 Leu
 Gly

 Ala
 Leu
 Asp
 Leu
 Phe
 Thr
 His
 Gly
 Tyr
 Ala
 Leu
 400

 Lys
 Leu
 Leu
 His
 Leu
 His
 His
 His
 His
 His
 His
 Leu
 His
 H

<210> 3606

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3606

Met Leu Ser Leu Leu Phe Leu Cys Thr Leu His Leu Ser Leu Ser Leu 1 5 10 15

Pro Ser Leu Arg Leu Thr Leu Thr Pro Ile Arg Leu Ser Ser Leu Pro
20 25 30

Gly Leu Cys Cys Arg Lys Val Pro Gly Thr Ala Leu Ile Thr Ser Ala 35 40 45

Lys Leu Phe Leu Met 11e Tyr Phe Leu Ser Thr Pro Pro Leu Leu Thr
50 55 60

Leu Phe Asn Ile Leu Met Thr Phe Phe Phe Val Ala Pro Pro Leu Asn 65 70 75 80

Leu Leu Asn Lys Thr Tyr Phe Cys Ser Phe Ser Ile Tyr Ser Pro Lys
85 90 95

Asp 11e Gly Tyr Pro Pro Pro Lys Leu Lys Phe Leu Leu His Pro Leu
100 105 110

Pro Thr Ser Ala

115

<210> 3607

<211> 217

<212> PRT

<213> Homo sapiens

<400> 3607

Met Thr Phe Ser Arg Cys Gln Leu Pro Cys Gln Pro Arg Ser Pro Met
1 5 10 15

Glu Thr Val Glu Thr Asn Trp Asp His Val Ser Arg Trp Lys Lys Gly
20 25 30

Gly Arg Gly Asp His Tyr Cys Gln Val 11e Gln Lys Arg Ala 35 40 45

Glu Pro Pro Ala Leu Arg Arg Glu Thr Leu Asp Ser Gln Gly Asp Ser 50 55 60

Gly Lys Gly Asp Ser Ala GIn Thr Pro Ser Val Pro Glu Ala Asn Ser 65 70 75 80

Trp Lys Thr Gly Ala Arg Ala Asn Leu Asn Lys Asn Gly Gly Lys
85 90 95

Gly Gly Lys Glu Gly Ser Cys Glu Leu Pro Glu Val Gly Gln Gly Ala 100 105 110

Pro Gln Arg Met Gly Cys Tyr Glu Ser Glu Asn Met Ala Thr His Pro 115 120 125

Ala Ser Phe Ile Tyr Tyr Gln Pro Pro Gln Asn Trp Cys Leu Lys Thr 130 135 140

Ile Ile Ile Tyr Val Met Ser Leu Cys Gly Glu Leu Gly Gly Pro Ser 145 150 155 160

Ala Ser Pro Ser Leu Ala Val Ser Ala Val Thr Gly Asp Trp Pro Gly
165 170 175

Leu Ala Ser Leu Pro Gly Ser Cys Pro Gly Arg Gly Gly Cys Leu Leu 180 185 190

Ser Ala Glu Thr Val Ser Arg Ser Ile Ser Thr Ser Pro His Arg Thr 195 200 205

Ser Ser Cys Thr Thr Gly Ile Ser Ala 210 215

<210> 3608

<211> 777

<212	2> PF	T5													
<213	3> Ho	omo s	sapie	ens											
<400)> 36	808													
Met	Leu	Asp	Met	Ser	Phe	Lys	Asp	Ala	Glu	Arg	Gly	Asp	Asp	Thr	Ser
1				5					10					15	
Cys	Glu	Asn	Leu	Leu	Asp	Ala	Phe	Ser	lle	Lys	Leu	Ser	Glu	Thr	His
			20					25					30		
Gly	Tyr	G1y	Val	Gln	Glu	Glu	Phe	Thr	Glu	Glu	Asn	Lys	Leu	Leu	Glu
		35					40					45			
Ala	Cys	Пе	Phe	Lys	Asn	Asn	Glu	Leu	Leu	Lys	Asn	lle	Gln	Asp	Val
	50					55					60				
Gln	Ser	Gln	Пе	Ser	Lys	He	Gly	Leu	Lys	Asp	Pro	Thr	Val	Pro	Ala
65					70					75					80
Val	Lys	His	Arg	Lys	Lys	Ser	Leu	lle	Arg	Leu	Asp	Lys	Val	Leu	Asp
				85					90					95	
Glu	Tyr	Glu	Glu		Lys	Arg	His	Leu		Glu	Met	Ala	Asn		Leu
Glu	Tyr	Glu	Glu 100		Lys	Arg	His	Leu 105		Glu	Met	Ala	Asn 110		Leu
			100	Glu				105	Gln					Ser	
			100	Glu				105	Gln				110	Ser	
Pro	His	Phe 115	100 Lys	Glu Asp	Gly	Arg	G1u 120	105 Lys	Gln Thr	Val	Asn	Gln 125	110	Ser Cys	Glr
Pro	His	Phe 115	100 Lys	Glu Asp	Gly	Arg	G1u 120	105 Lys	Gln Thr	Val	Asn	Gln 125	110 Gln	Ser Cys	Glr
Pro Asn	His Thr 130	Phe 115 Val	100 Lys Val	Glu Asp Leu	Gly Trp	Arg Glu 135	Glu 120 Asn	105 Lys Thr	Gln Thr Lys	Val Ala	Asn Leu 140	Gln 125 Val	110 Gln	Ser Cys Glu	Glr Cys
Pro Asn	His Thr 130	Phe 115 Val	100 Lys Val	Glu Asp Leu	Gly Trp	Arg Glu 135	Glu 120 Asn	105 Lys Thr	Gln Thr Lys	Val Ala	Asn Leu 140	Gln 125 Val	110 Gln Thr	Ser Cys Glu	Glr Cys
Pro Asn Leu 145	His Thr 130 Glu	Phe 115 Val Gln	100 Lys Val Cys	Glu Asp Leu Gly	Gly Trp Arg 150	Arg Glu 135 Val	G1u 120 Asn Leu	105 Lys Thr Glu	Gln Thr Lys Leu	Val Ala Leu 155	Asn Leu 140 Lys	Gln 125 Val Gln	110 Gln Thr	Ser Cys Glu Gln	Glr Cys Asr 160
Pro Asn Leu 145	His Thr 130 Glu	Phe 115 Val Gln	100 Lys Val Cys	Glu Asp Leu Gly	Gly Trp Arg 150 Thr	Arg Glu 135 Val	G1u 120 Asn Leu	105 Lys Thr Glu	Gln Thr Lys Leu Gln	Val Ala Leu 155 Lys	Asn Leu 140 Lys	Gln 125 Val Gln Glu	110 Gln Thr Tyr	Ser Cys Glu Gln	Glr Cys Asr 160
Pro Asn Leu 145 Phe	His Thr 130 Glu Lys	Phe 115 Val Gln Ser	100 Lys Val Cys	Glu Asp Leu Gly Leu 165	Gly Trp Arg 150 Thr	Arg Glu 135 Val	G1u 120 Asn Leu Leu	105 Lys Thr Glu	Gln Thr Lys Leu Gln 170	Val Ala Leu 155 Lys	Asn Leu 140 Lys Glu	Gln 125 Val Gln Glu	110 Gln Thr Tyr	Ser Cys Glu Gln Val 175	Glr Cys Asr 160
Pro Asn Leu 145 Phe	His Thr 130 Glu Lys	Phe 115 Val Gln Ser	100 Lys Val Cys	Glu Asp Leu Gly Leu 165	Gly Trp Arg 150 Thr	Arg Glu 135 Val	G1u 120 Asn Leu Leu	105 Lys Thr Glu	Gln Thr Lys Leu Gln 170	Val Ala Leu 155 Lys	Asn Leu 140 Lys Glu	Gln 125 Val Gln Glu	110 Gln Thr Tyr Ser	Ser Cys Glu Gln Val 175	Glr Cys Asr 160
Pro Asn Leu 145 Phe Ser	His Thr 130 Glu Lys Leu	Phe 115 Val Gln Ser	100 Lys Val Cys 11e Ala 180	Glu Asp Leu Gly Leu 165 Ser	Gly Trp Arg 150 Thr	Arg Glu 135 Val Thr	G1u 120 Asn Leu Leu	Thr Glu Lys Lys 185	Gln Thr Lys Leu Gln 170 Glu	Val Ala Leu 155 Lys	Asn Leu 140 Lys Glu Leu	Gln 125 Val Gln Glu Lys	110 Gln Thr Tyr Ser Lys	Ser Cys Glu Gln Val 175 Arg	Glr Cys Asr 160 11e
Pro Asn Leu 145 Phe Ser	His Thr 130 Glu Lys Leu	Phe 115 Val Gln Ser	100 Lys Val Cys 11e Ala 180	Glu Asp Leu Gly Leu 165 Ser	Gly Trp Arg 150 Thr	Arg Glu 135 Val Thr	G1u 120 Asn Leu Leu	Thr Glu Lys Lys 185	Gln Thr Lys Leu Gln 170 Glu	Val Ala Leu 155 Lys	Asn Leu 140 Lys Glu Leu	Gln 125 Val Gln Glu Lys	110 Gln Thr Tyr Ser Lys 190	Ser Cys Glu Gln Val 175 Arg	Glr Cys Asr 160 11e
Pro Asn Leu 145 Phe Ser	His Thr 130 Glu Lys Leu Glu	Phe 115 Val Gln Ser Gln 11e 195	Val Cys 11e Ala 180 Glu	Glu Asp Leu Gly Leu 165 Ser	Gly Trp Arg 150 Thr Tyr	Arg Glu 135 Val Thr Met	Glu 120 Asn Leu Leu Gly Glu 200	Thr Glu Lys Lys Glu Cys Glu	Gln Thr Lys Leu Gln 170 Glu Phe	Val Ala Leu 155 Lys Asn	Asn Leu 140 Lys Glu Leu Glu	Gln 125 Val Gln Glu Lys His 205	110 Gln Thr Tyr Ser Lys 190	Ser Cys Glu Gln Val 175 Arg	Glr Cys Asr 160 11e

Lys Met Lys Thr Phe Glu Glu Pro Pro Phe Glu Lys Glu Ala Asn lle

lle Val Asp Arg Tr
p Leu Asp 11e As
n Glu Lys Thr Glu Asp Tyr Tyr $\,$

				245					250					255	
Glu	Asn	Leu	Gly	Arg	Ala	Leu	Ala	Leu	Trp	Asp	Lys	Leu	Phe	Asn	Leu
			260					265					270		
Lys	Asn	Val	He	Asp	Glu	Trp	Thr	Glu	Lys	Ala	Leu	Gln	Lys	Met	Glu
		275					280					285			
Leu	His	Gln	Leu	Thr	Glu	Glu	Asp	Arg	Glu	Arg	Leu	Lys	Glu	Glu	Leu
	290					295					300				
Gln	Val	His	Glu	Gln	Lys	Thr	Ser	Glu	Phe	Ser	۸rg	Arg	Val	Ala	Glu
305					310					315					320
He	Gln	Phe	Leu	Leu	Gln	Ser	Ser	Glu	lle	Pro	Leu	Glu	Leu	Gln	Val
				325					330					335	
Met	Glu	Ser	Ser	He	Leu	Asn	Lys	Met	Glu	His	Val	Gln	Lys	Cys	Leu
			340					345					350		
Thr	Gly	Glu	Ser	Asn	Cys	His	Ala	Leu	Ser	Gly	Ser	Thr	Ala	${\tt Glu}$	Leu
		355					360					365			
Arg	G]u	Asp	Leu	Asp	Gln	Ala	Lys	Thr	Gln	He	Gly	Met	Thr	Glu	Ser
	370					375					380				
Leu	Leu	Lys	Ala	Leu	Ser	Pro	Ser	Asp	Ser	Leu	Glu	lle	Phe	Thr	Lys
385					390					395					400
Leu	Glu	Glu	He	Gln	Gln	Gln	lle	Leu	Gln	Gln	Lys	His	Ser	Met	lle
				405					410					415	
Leu	Leu	Glu	Asn	Gln	lle	Gly	Cys	Leu	Thr	Pro	Glu	Leu	Ser	Glu	Leu
			420					425					430		
Lys	Lys	Gln	Tyr	Glu	Ser	Val	Ser	Asp	Leu	Phe	Asn	Thr	Lys	Lys	Ser
		435					440					445			
Val	Leu	Gln	Asp	His	Phe	Ser	Lys	Leu	Leu	Asn	Asp	Gln	Cys	Lys	Asn
	450					455					460				
Phe	Asn	Asp	Trp	Phe	Ser	Asn	He	Lys	Val	Asn	Leu	Lys	Glu	Cys	Phe
465					470					475					480
Glu	Ser	Ser	Glu	Thr	Lys	Lys	Ser	Va1	Glu	Gln	Lys	Leu	Gln	Lys	Leu
				485					490					495	
Ser	Asp	Phe	Leu	Thr	Leu	Glu	Gly	Arg	Asn	Ser	Lys	lle	Lys	Gln	Val
			500					505					510		
Asp	Ser	Va]	Leu	Lys	His	Va1	Lys	Lys	His	Leu	Pro	Lys	Ala	His	Val
		515					520					525			
Lvs	Glu	Len	He	Ser	Trn	Len	Val	G1v	Gln	GIn	Phe	Glu	Leu	Glu	Lvs

	530					535					540				
Met	Glu	Ser	He	Cys	Gln	Ala	Arg	Ala	Lys	Glu	Leu	Glu	Asp	Ser	Leu
545					550					555					560
Gln	Gln	Leu	Leu	Arg	Leu	Gln	Asp	Asp	His	Arg	Asn	Leu	Arg	Lys	Trp
				565					570					575	
Leu	Thr	Asn	Gln	Glu	Glu	Lys	Trp	Lys	Gly	Thr	Glu	Glu	Pro	Gly	Glu
			580					585					590		
Lys	Thr	Glu	Leu	Phe	Cys	Gln	Ala	Leu	Ala	Arg	Lys	Arg	Glu	Gln	Phe
		595					600					605			
Glu	Ser	Val	Ala	Gln	Leu	Asn	Asn	Ser	Leu	Lys	Glu	Tyr	G1y	Phe	Thr
	610					615					620				
Glu	Glu	G1u	Glu	lle	He	Met	Glu	Ala	Thr	Cys	Leu	Met	Asp	Arg	Tyr
625					630					635					640
Gln	Thr	Leu	Leu	Arg	Gln	Leu	Ser	Glu	He	Glu	Glu	Glu	Asp	Lys	Leu
				645					650					655	
Leu	Pro	Thr	Glu	Asp	Gln	Ser	Phe	Asn	Asp	Leu	Ala	His	Gly	Val	He
			660					665					670		
His	Trp	He	Lys	Glu	He	Lys	Glu	Ser	Leu	Met	Val	Leu	Asn	Ser	Ser
		675					680					685			
Glu	Gly	Lys	Met	Pro	Leu	Glu	Glu	Arg	He	Gln	Lys	lle	Lys	Glu	He
	690					695					700				
He	Leu	Leu	Lys	Pro	Glu	Gly	Asp	Ala	Arg	He	Glu	Thr	Île	Thr	Lys
705					710					715					720
Gln	Ala	Glu	Ser	Ser	Glu	Ala	Pro	Leu	Val	Gln	Lys	Thr	Leu	Thr	Asp
				725					730					735	
He	Ser	Asn	Gln	Trp	Asp	Asn	Thr	Leu	.His	Leu	Ala	Ser	Thr	Tyr	Leu
			740					745					750		
Ser	His	Gln	Glu	Lys	Leu	Leu	Leu	Glu	Gly	Glu	Lys	Tyr	Leu	Gln	Ser
		755					760					765			
Lys	Glu	Asp	Leu	Arg	Leu	Met	Leu	He							
	770					775									

<210> 3609

<211> 274

<212> PRT

<213≻ Homo sapiens

<400)> 36	509													
Met	Leu	Glu	Asp	He	Ala	Ser	Pro	Arg	Pro	Pro	Ala	Glu	Gly	Phe	He
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Asp	Glu	Thr	Pro	Asn	Phe	11e	He	Pro	Ala	Gln	Arg	Ala	Glu	Pro	Met
			20					25					30		
Arg	He	Val	Arg	Gln	Pro	Thr	Pro	Pro	Pro	Gly	Asp	Leu	Glu	Pro	Pro
		35					40					45			
Phe	Gln	Pro	Ser	Ala	Leu	Pro	Ala	Asp	Pro	Leu	Glu	Ser	Pro	Pro	Thr
	50					55					60				
Ala	Pro	Asp	Pro	Ala	Leu	Glu	Leu	Pro	Ser	Thr	Pro	Pro	Pro	Ser	Ser
65					70					75					80
Leu	Leu	Arg	Pro	Arg	Leu	Ser	Pro	Trp	Gly	Leu	Ala	Pro	Leu	Phe	Arg
				85					90					95	
Ser	Val	Arg	Ser	Lys	Leu	Glu	Ser	Phe	Ala	Asp	He	Phe	Leu	Thr	Pro
			100					105					110		
Asn	Lys	Thr	Pro	G1n	Pro	Pro	Pro	Pro	Ser	Pro	Pro	Met	Lys	Leu	Glu
		115					120					125			
Leu	Lys	lle	Ala	He	Ser	Glu	Ala	Glu	Gln	Ser	Gly	Ala	Ala	Glu	Gly
	130					135					140				
Thr	Λla	Ser	Val	Ser	Pro	Arg	Pro	Pro	He	Arg	Gln	Trp	Arg	Th.r	Gln
145					150					155					160
Asp	His	Asn	Thr	Pro	Ala	Leu	Leu	Pro	Lys	Pro	Ser	Leu	G1y	Arg	Ser
				165					170					175	
Tyr	Ser	Cys	Pro	Asp	Leu	Gly	Pro	Pro	Gly	Pro	Gly	Thr	Cys	Thr	Trp
			180					185					190		
Pro	Pro	Ala	Pro	Pro	Gln	Pro	Ser	Arg	Pro	Arg	Pro	Arg	Arg	His	Thr
		195	٠				200					205			
Val	Gly	Gly	Gly	Glu	Met	Ala	Arg	Ala	Pro	Pro	Pro	Pro	Arg	Pro	Cys
	210					215					220				
Leu	Arg	Lys	Glu	Val	Phe	Pro	Leu	Gly	Gly	Val	Gly	Ala	Ser	Pro	Ser
225					230					235					240
Leu	Thr	Thr	Ser	Cys	Ser	Ser	Thr	Ala	Ser	Thr	Ser	Phe	Ser	Gly	Pro
•				245					250					255	
Ala	Glu	Pro	Arg	Glu	Gly	Ala	Lys	Ser	Leu	Lys	Gly	Pro	G1y	Ala	Phe

Arg Thr <210> 3610 <211> 497 <212> PRT <213> Homo sapiens <400> 3610 Met Asp Asn Arg Gln Asn Val Thr Pro Ala Leu Ile Phe Ala Ile Thr Val Ala Thr 11e Gly Ser Phe Gln Phe Gly Tyr Asn Thr Gly Val 11e Asn Ala Pro Glu Thr 11e 11e Lys Glu Phe 11e Asn Lys Thr Leu Thr Asp Lys Ala Asn Ala Pro Pro Ser Glu Val Leu Leu Thr Asn Leu Trp Ser Leu Ser Val Ala 11e Phe Ser Val Gly Gly Met 11e Gly Ser Phe Ser Val Gly Leu Phe Val Asn Arg Phe Gly Arg Arg Asn Ser Met Leu lle Val Asn Leu Leu Ala Ala Thr Gly Gly Cys Leu Met Gly Leu Cys Lys Ile Ala Glu Ser Val Glu Met Leu Ile Leu Gly Arg Leu Val Ile Gly Leu Phe Cys Gly Leu Cys Thr Gly Phe Val Pro Met Tyr 11e Gly Glu lle Ser Pro Thr Ala Leu Arg Gly Ala Phe Gly Thr Leu Asn Gln Leu Gly Ile Val Ile Gly Ile Leu Val Ala Gln Ile Phe Gly Leu Glu Leu 11e Leu Gly Ser Glu Glu Leu Trp Pro Val Leu Leu Gly Phe Thr

lle Leu Pro Ala lle Leu Gln Ser Ala Ala Leu Pro Cys Cys Pro Glu

		195					200					205			
Ser	Pro	۸rg	Phe	Leu	Leu	He	Asn	Arg	Lys	Lys	Glu	Glu	Asn	Ala	Thr
	210					215					220				
Arg	He	Leu	Gln	Arg	Leu	Trp	Gly	Thr	Gln	Asp	Val	Ser	Gln	Asp	He
225					230					235					240
Gln	Glu	Met	Lys	Asp	Glu	Ser	Ala	Arg	Met	Ser	Gln	GJu	Lys	GIn	Val
				245					250					255	
Thr	Val	Leu	Glu	Leu	Phe	Arg	Val	Ser	Ser	Tyr	Arg	Gln	Pro	He	He
			260					265					270		
Ile	Ser	Ile	Val	Leu	Gln	Leu	Ser	Gln	Gln	Leu	Ser	Gly	lle	Asn	Ala
		275					280					285			
Val	Phe	Tyr	Tyr	Ser	Thr	Gly	He	Phe	Lys	Asp	Ala	Gly	Val	Gln	Gln
	290					295					300				
Pro	He	Tyr	Ala	Thr	He	Ser	Ala	G1 y	Val	Va]	Asn	Thr	Пе	Phe	Thr
305					310					315					320
Leu	Leu	Ser	Leu	Phe	Leu	Val	Glu	Arg	Ala	Gly	Arg	Arg	Thr	Leu	His
				325					330					335	
Met	He	Gly	Leu	Gly	Gly	Met	Ala	Phe	Cys	Ser	Thr	Leu	Met	Thr	Val
			340					345					350		
Ser	Leu	Leu	Leu	Lys	Asn	His	Tyr	Asn	Gly	Met	Ser	Phe	Val	Cys	He
		355					360					365			
Gly		lle	Leu	Val	Phe		Ala	Cys	Phe	Glu		Gly	Pro	Gly	Pro
	370					375					380				
	Pro	Trp	Phe	He		Ala	Glu	Leu	Phe		Gln	Gly	Pro	Arg	
385					390		_			395		_		-1	400
Ala	Ala	Met	Ala		Ala	Gly	Cys	Ser		Trp	Thr	Ser	Asn		Leu
	0.1			405					410	T.	,	0.1		415	17 7
Val	Gly	Leu		Phe	Pro	Ser	Ala		Tyr	lyr	Leu	GIy		Tyr	Val
DI		7.1	420	T)	61	ro.i		425	m.	101	,		430	an i	131
Phe	He		Phe	Ihr	GIÿ	Phe	Leu	116	lhr	Phe	Leu		Phe	Inr	Phe
ומ	1	435	D	C1.	TI.		440	4	TI.	DI	CT	445	7.1	TI.	4
Phe		val	Pro	GIU	Inr		Gly	Arg	Hhr	Phe		Asp	116	Inr	Arg
Λ1	450	C1	C1	C1	А 1	455	C1	А1	۸	Λ	460 Sor	C1	1	Λ	C1
A1a	rne	olu	Oly	0111		nis	Gly	мта	ASP		oe1.	σīÿ	LyS	ASP	
400					1/1/1					1/4					490
Val	Mot	610	Mot	Acn	470 Sor	11.	Clu	Dasc	A 1 ~	475	Clar	The	Thr	The	480 Acn

Val <210> 3611 <211> 888 <212> PRT <213> Homo sapiens <400> 3611 Met Leu Leu Asn Gly Asp Cys Pro Glu Ser Leu Lys Lys Glu Ala Ala Ala Ala Glu Pro Pro Arg Glu Asn Gly Leu Asp Glu Ala Gly Pro Gly Asp Glu Thr Thr Gly Gln Glu Val Ile Val Ile Gln Asp Thr Gly Phe Ser Val Lys Ile Leu Ala Pro Gly Ile Glu Pro Phe Ser Leu Gln Val Ser Pro Gln Glu Met Val Gln Glu lle His Gln Val Leu Met Asp Arg Glu Asp Thr Cys His Arg Thr Cys Phe Ser Leu His Leu Asp Gly Asn Val Leu Asp His Phe Ser Glu Leu Arg Ser Val Glu Gly Leu Gln Glu Gly Ser Val Leu Arg Val Val Glu Glu Pro Tyr Thr Val Arg Glu Ala Arg 11e His Val Arg His Val Arg Asp Leu Leu Lys Ser Leu Asp Pro Ser Asp Ala Phe Asn Gly Val Asp Cys Asn Ser Leu Ser Phe Leu Ser Val Phe Thr Asp Gly Asp Leu Gly Asp Ser Gly Lys Arg Lys Lys Gly Leu Glu Met Asp Pro 11e Asp Cys Thr Pro Pro Glu Tyr 11e Leu Pro

Gly Ser Arg Glu Arg Pro Leu Cys Pro Leu Gln Pro Gln Asn Arg Asp

		195					200					205			
Trp	Lys	Pro	Leu	Gln	Cys	Leu	Lys	Val	Leu	Thr	Thr	Ser	Gly	Trp	Asn
	210					215					220				
Pro	Pro	Pro	Gly	Asn	Arg	Lys	Met	His	Gly	Asp	Leu	Met	Tyr	Leu	Phe
225					230					235					240
Val	He	Thr	Ala	Glu	Лsp	Arg	Gln	Val	Ser	lle	Thr	Ala	Ser	Thr	Arg
				245					250					255	
Gly	Phe	Tyr	Leu	Asn	Gln	Ser	Thr	Ala	Tyr	His	Phe	Asn	Pro	Lys	Pro
			260					265					270		
Ala	Ser	Pro	Arg	Phe	Leu	Ser	His	Ser	Leu	Val	Glu	Leu	Leu	Λsn	Gln
		275					280					285			
He	Ser	Pro	Thr	Phe	Lys	Lys	Asn	Phe	Ala	Val	Leu	Gln	Lys	Lys	Arg
	290					295					300				
Val	Gln	Arg	His	Pro	Phe	Glu	Arg	lle	Ala	Thr	Pro	Phe	Gln	Val	Tyr
305					310					315					320
Ser	Trp	Thr	Ala	Pro	Gln	Ala	Glu	His	Ala	Met	Asp	Cys	Val	Arg	Ala
				325					330					335	
Glu	Asp	Ala		Thr	Ser	Arg	Leu		Tyr	Glu	Glu	His	He	Pro	Gly
			340					345					350		
Gln	Thr		Asp	Trp	Asn	Glu		Leu	Gln	Thr	Thr		Glu	Leu	Pro
		355		_			360	_				365			
Arg		Asn	Leu	Pro	Glu		Leu	l.eu	Arg	Glu		Ala	He	Phe	Lys
	370			101	m.	375			m)		380	. 7			., ,
	His	Ser	Asp	Phe		Ala	Ala	Ala	lhr		GTy	Ala	Met	Ala	
385		61		v. 1	390	4.7	7.1		D	395	C1	C1	TI	1	400
116	Asp	ыу	Asn			Ala	116	Asn					Thr		
Cla	Mat	Dha	110	405		Aan	110	Dho			Lau		Dho	415	
0111	Met	rne	420	11 þ	ASII	ASII	1.16	425	rne	261	Leu	uly	Phe 430	nsp	vai
Ara	Acn	Hic		Lvc	Acn	Dho	Clv		Acn	Vo.1	Λla	Λla	Tyr	Val	A 1 a
AI g	ASP	435	1 y 1	Lys	nsp	rne	440	олу	лър	vai	Ма	445	1 y 1	vai	N.I a
Pro	Thr		Acn	Lou	Asn	Cl _v		Δεσ	Thr	Tur	Acn		Va]	Aen	Val
110	450	ASH	пър	Leu	иоп	455	161	Mg	1111	1 y 1	460	MICI	, (1)	изр	• (1)
Glu		Len	Tvr	Thr	Leu		Thr	Val	Val	Val		Tvr	Arg	Glv	Tvr
465	017	120 U	. , .		470	017	1.1			475		. , .	8	013	480
	Val	Thr	Ala	Gln		116	lle	Pro	Glv		Leu	Glu	Aro	Asn	

				485					490					495	
G] u	Gln	Ser	Val	He	Tyr	Gly	Ser	Ile	Asp	Phe	Gly	Lys	Thr	Val	Val
			500					505					510		
Ser	His	Pro	Arg	Tyr	Leu	Glu	Leu	Leu	Glu	Arg	Thr	Ser	۸rg	Pro	Leu
		515					520					525			
Lys	He	Leu	Arg	His	Gln	Val	Leu	Asn	Asp	Arg	Asp	Glu	G]u	Val	Glu
	530					535					540				
Leu	Cys	Ser	Ser	Val	Glu	Cys	Lys	G1 y	lle	Ile	Gly	Asn	Asp	Gly	Arg
545					550					555					560
His	Tyr	Ile	Leu	Asp	Leu	Leu	Arg	Thr	Phe	Pro	Pro	Asp	Leu	Asn	Phe
				565					570					575	
Leu	Pro	Val	Pro	Gly	Glu	Glu	Leu	Pro	Glu	Glu	Cys	Ala	Arg	Ala	Gly
			580					585					590		
Phe	Pro	Arg	Ala	His	Arg	His	Lys	Leu	Cys	Cys	Leu	Arg	G1n	Glu	Leu
		595					600					605			
Val	Gly	Ala	Phe	Val	Glu	His	Arg	Tyr	Leu	Leu	Phe	Met	Lys	Leu	Ala
	610					615					620				
Ala	Leu	Gln	Leu	Met	Gln	Gln	Asn	Ala	Ser	Gln	Leu	Glu	Thr	Pro	Ser
625					630					635					640
Ser	Leu	Glu	Asn	Gly	Gly	Pro	Ser	Ser	Leu	Glu	Ser	Lys	Ser	Glu	Asp
				645				,	650					655	
Pro	Pro	Gly	Gln	Glu	Ala	Gly	Ser	Glu	Glu	Glu	Gly	Ser	Ser	Ala	Ser
			660					665					670		
Gly	Leu	Ala	Lys	Val	Lys	Glu	Leu	Ala	Glu	Thr	He	Ala	Ala	Asp	Asp
		675					680					685			
Gly	Thr	Asp	Pro	Arg	Ser	Arg	Glu	Val	lle	Arg	Asn	Ala	Cys	Lys	Ala
	690					695					700				
Val	Gly	Ser	He	Ser	Ser	Thr	Ala	Phe	Asp	He	Arg	Phe	Asn	Pro	Asp
705					710					715					720
He	Phe	Ser	Pro	Gly	Val	Arg	Phe	Pro	Glu	Ser	Cys	Gln	Asp	Glu	Val
				725					730					735	
Arg	Asp	Gln	Lys	Gln	Leu	Leu	Lys	Asp	Ala	Ala	Ala	Phe	Leu	Leu	Ser
			740					745					750		
Cys	Gln	He	Pro	Gly	Leu	Val	Lys	Asp	Cys	Met	Glu	His	Ala	Val	Leu
		755					760					765			
Pro	Val	Asp	Gly	Ala	Thr	Leu	Ala	Glu	Val	Met	Arg	Gln	Arg	Gly	11e

775 780 770 Asn Met Arg Tyr Leu Gly Lys Val Leu Glu Leu Val Leu Arg Ser Pro 790 795 Ala Arg His Gln Leu Asp His Val Phe Lys Ile Gly Ile Gly Glu Leu 805 810 815 lle Thr Arg Ser Ala Lys His lle Phe Lys Thr Tyr Leu Gln Gly Val 820 825 830 Glu Leu Ser Gly Leu Ser Ala Ala Ile Ser His Phe Leu Asn Cys Phe 835 840 845 Leu Ser Ser Tyr Pro Asn Pro Val Ala His Leu Pro Ala Asp Glu Leu 850 855 860 Val Ser Lys Glu Arg Asn Lys Arg Arg Lys Thr Gly Pro Arg Gly Leu 870 875 Gln lle Thr Gln Pro Gly Leu Ser 885

<210> 3612

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3612

Met Arg Asp Thr Gly Ser Cys Leu Ser Leu Asn lle Pro Pro Ala Gly

1 5 10 15

Gly His Lys Gly Ala Asp Ala Ala Asp Val Ser Ser Gly Ala Met Gly
20 25 30

His Arg His Pro Ala Gly Ser Glu Ala Ala Glu Ser Pro Gly Val Thr
35 40 45

Phe Pro Ala Gly Thr Arg Asn Thr Gly Ser Cys Thr Phe Pro Leu Ser 50 55 60

Arg Arg Arg Trp Val lle Thr Gly Phe Thr Ser Phe Pro Leu Gln Met
65 70 75 80

Pro Asp Gly Pro Gly Met Thr Ala Ala Ser Gly Lys Leu Tyr Gln Phe 85 90 95

Arg His Pro Val Arg

<210> 3613

<211> 149

<212> PRT

<213> Homo sapiens

⟨400⟩ 3613

Met Val Leu Leu Leu Ser Leu Asp Phe Trp Ser Val Lys Asn Val

1 5 10 15

Thr Gly Arg Leu Leu Val Gly Leu Arg Trp Trp Asn Gln 11e Asp Glu 20 25 30

Asp Gly Lys Ser His Trp 11e Phe Glu Ala Arg Lys Val Ser Pro Asn 35 40 45

Ser Ile Ala Ala Thr Glu Ala Glu Ala Arg Ile Phe Trp Leu Gly Leu 50 55 60

Ile Ile Cys Pro Met Ile Trp lle Val Phe Phe Phe Ser Thr Leu Phe
65 70 75 80

Ser Leu Lys Leu Lys Trp Leu Ala Leu Val Val Ala Gly Ile Ser Leu 85 90 95

Gln Ala Ala Asn Leu Tyr Gly Tyr Ile Leu Cys Lys Met Gly Gly Asn 100 . 105 110

Ser Asp 11e Gly Lys Val Thr Ala Ser Phe Leu Ser Gln Thr Val Phe 115 120 125

Gln Thr Ala Cys Pro Gly Asp Phe Gln Lys Pro Gly Leu Glu Gly Leu 130 135 140

Glu Ile His Gln His

145

<210> 3614

<211> 626

<212> PRT

<213> Homo sapiens

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Λla	Thr	Phe	Leu	Thr	Leu	Leu	Gln	Asp	lle	Pro	Ser	Phe	Ser	Pro	Пe
			20					25					30		
Phe	Leu	Leu	Ser	Thr	Ser	Glu	Thr	Met	Tyr	Ser	Glu	Leu	Pro	Glu	Glu
		35					40					45			
Val	Lys	Cys	Ile	Phe	Arg	He	Gln	Tyr	Glu	Glu	Val	Leu	Tyr	lle	Gln
	50					55					60				
Arg	Pro	Ile	Glu	Glu	Asp	Arg	Arg	Lys	Phe	Phe	Gln	Glu	Leu	He	Leu
65					70					75					80
Asn	Gln	Ala	Ser	Met	Ala	Pro	Pro	Arg	Arg	Lys	His	Ala	Ala	Leu	Cys
				85				•	90					95	
Ala	Met	Glu	Val	Leu	Pro	Leu	Ala	Leu	Pro	Ser	Pro	Pro	Arg	Gln	Leu
			100					105					110		
Ser	Glu	Ser		Lvs	Ser	Arg	Met		Asp	Gln	Glu	Glu		Thr	Leu
		115					120		•			125			
Arg	Glu		Arg	Leu	Phe	Leu		Asp	Val	Thr	Lvs		Leu	Ala	Thr
	130					135	Ü	•			140	Ü			
Asp		Arg	Phe	Asn	He	Phe	Ser	Lvs	Pro	Val		He	Glu	Glu	Val
145	, -	0			150	,		, -		155					160
	Asp	Tvr	Leu	Glu		He	Lvs	Glu	Pro		Asp	Leu	Ser	Thr	
		.,.	-	165			_,.		170					175	
11e	Thr	Lvs	He		Lvs	His	Asn	Tvr		Thr	Ala	Lvs	Asp		Leu
		-,-	180		_, -			185				,	190		
Lvs	Asp	lle		Leu	He	Cys	Ser		Ala	Leu	Glu	Tvr		Pro	Asp
-,-		195				•	200					205			
Lvs	Asp		Glv	Asp	Lvs	He		Arg	llis	Arg	Ala		Thr	Leu	Lvs
, -	210			,,,,	2 -	215		0		0	220				_,_
Asp		Ala	His	Ala	He	lle	Ala	Ala	Glu	l.eu		Pro	Glu	Phe	Asn
225					230					235					240
	Leu	Cvs	Glu	Glu		Lys	Glu	Ala	Arg		Lvs	Arg	G1 v	Leu	
2,0		-,0		245		,0	-10	, a	250			0	• ,	255	
Val	Thr	Ser	Glu		He	Asn	Pro	His		Thr	Glv	Ala	Arg		Thr
									~ -				0	5	

				260					265					270		
G	lu	Thr	Arg	Val	Glu	Glu	Ala	Phe	Arg	His	Lys	Gln	Arg	Asn	Pro	Met
			275					280					285			
Λ	sp	Val	Trp	His	Asn	Ser	Ala	Asn	Lys	Cys	Ala	Phe	Arg	Val	Arg	Arg
		290					295					300				
l.	ys.	Ser	Arg	Arg	Arg	Ser	Gln	Trp	Gly	Lys	Gly	lle	Пе	Lys	Lys	Arg
3	05					310					315					320
L	ys.	Val	Asn	Asn	Leu	Lys	Lys	Asp	Glu	Glu	Asp	Thr	Lys	Phe	Ala	Asp
					325					330					335	
T	yr	Glu	Asn	His	Thr	Glu	Asp	Arg	Lys	Leu	Leu	Glu	Asn	Gly	Glu	Phe
				340					345					350		
G	lu	Val	Ser	Thr	Asp	Cys	His	Glu	Glu	Asn	Gly	Glu	Glu	Thr	Gly	Asp
			355					360					365			
L	.eu	Ser	Met	Thr	Asn	Asp	Glu	Ser	Ser	Cys	Asp	He	Met	Asp	Leu	Asp
		370					375					380				
G	lln	Gly	Gln	Arg	Leu	Asn	Asn	Gly	Ala	G1 y	Thr	Lys	Glu	Asn	Phe	Ala
3	85					390					395					400
S	er	Thr	Glu	Glu	Glu	Ser	Ser	Asn	Glu	Ser	Leu	Leu	Val	Asn	Ser	Ser
					405					410					415	
S	er	Ser	Leu	Asn	Pro	G] u	Gln	Thr	Ser	Arg	Lys	Glu	Thr	Phe	Leu	Lys
				420					425					430		
G	Пy	Asn	Cys	Leu	Asn	Gly	Glu	Ala	Ser	Thr	Asp	Ser	Phe	Glu	Gly	He
			435					440					445			
P	ro	Val	Leu	Glu	Cys	Gln	Asn	Gly	Lys	Leu	Glu	Val	Val	Ser	Phe	Cys
		450					455					460				
A	sp	Ser	Gly	Asp	Lys	Cys	Ser	Ser	Glu	Gln	Lys	He	Leu	Leu	Glu	Asp
4	65					470					475					480
G	lln	Ser	Lys	Glu	Lys	Pro	Glu	Thr	Ser	Thr	G]u	Asn	His	Gly	Asp	Asp
					485					490					495	
L	.eu	Glu	Lys	Leu	Glu	Ala	Leu	Glu	Cys	Ser	Asn	Asn	Glu	Lys	Leu	Glu
				500					505					510		
P	ro	Gly		Asp	Val	Glu	Val		Asp	Ala	Glu	Leu		Lys	Glu	G1 y
			515					520					525			
Α	lla		Lys	Val	Lys	Lys	Tyr	Arg	Lys	Leu	He	Leu	Glu	Gln	Ala	Lys
		530					535					540				
7	hr	Thr	Sar	Lou	G1n	Lou	$V_{2}1$	Pro	C1n	G1n	Pro	Sor	Gla	Pro	Val	Pro

Pro Leu Ile Val Asp Arg Glu Arg Leu Lys Lys Leu Leu Asp Leu Leu Val Asp Lys Ser Asn Asn Leu Ala Val Asp Gln Leu Glu Arg Leu Tyr Ser Leu Leu Ser Gln Cys Ile Tyr Arg His Arg Lys Asp Tyr Asp Lys Ser Gln Leu Val Glu Glu Met Glu Arg Thr Val His Met Phe Glu Thr Phe Leu <210> 3615 <211> 131 <212> PRT <213> Homo sapiens <400> 3615 Met Asp Met Phe Thr Cys Leu Cys Val Arg Thr Tyr Ser Arg Val Cys Asp Thr Ala Ile Phe Thr Arg Leu Cys Asp Thr Ala Ile Phe Thr Arg Leu Cys Asp Thr Asp lle His Ala Phe Val Cys Arg Thr Tyr Ser His lle Cys Val. Tyr Gly His Ile His Ala Phe Val lle Gln Thr Tyr Ser Arg lle Cys Val Tyr Arg His Ser Arg Val Cys Val lle Arg lle Tyr Ser Arg 11e Cys Asp Thr Asp 11e Phe Thr Arg Leu Cys Asp Thr Ala lle Phe Thr Cys Leu Cys Asp Thr Asp lle His Ala Phe Val Cys Arg Thr Tyr Ser Arg Val Cys Val Tyr Arg His 11e His Ser Leu Glu Arg

Val Glu Ser

<210> 3616

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<212	2> PI	?T													
<213	3> He	omo s	sapie	ens											
<400)> 36	516													
Met	Thr	Ala	Ser	Ser	Val	Glu	Gln	Leu	Arg	Lys	Glu	Gly	Asn	Glu	Let
l				5					10					15	
Phe	Lys	Cys	G1 y	Asp	Tyr	Gly	Gly	Ala	Leu	Ala	Ala	Tyr	Thr	Gln	Ala
			20					25					30		
Leu	Gly	Leu	Asp	Ala	Thr	Pro	G1n	Asp	Gln	Ala	Val	Leu	His	Arg	Asr
		35					40					45			
Arg	Ala	Ala	Cys	His	Leu	Lys	Leu	Glu	Asp	Tyr	Asp	Lys	Ala	Glu	Thr
	50					55					60				
Glu	Ala	Ser	Lys	Ala	Пe	Glu	Lys	Asp	Gly	Gly	Asp	Val	Lys	Ala	Let
65					70					75					80
Tyr	Arg	Arg	Ser	Gln	Ala	Leu	G1u	Lys	Leu	Gly	Arg	Leu	Asp	Gln	Ala
				85					90					95	
Val	Leu	Asp	Leu	Gln	Arg	Cys	Val	Ser	Leu	G]u	Pro	Lys	Asn	Lys	Va]
			100					105					110		
Phe	Gln	Glu	Ala	Leu	Arg	Asn	11e	Gly	Gly	Gln	lle	Gln	Glu	Lys	Val
		115	•				120					125			
Arg	Tyr	Met	Ser	Ser	Thr	Asp	Ala	Lys	Val	Glu	Gln	Met	Phe	Gln	116
	130					135					140				
Leu	Leu	Asp	Pro	Glu	Glu	Lys	Gly	Thr	Glu	Lys	Lys	Gln	Lys	Ala	Ser
145					150					155					160
Gln	Asn	Leu	Va]	Val	Leu	Ala	Arg	Glu	Asp	Ala	Gly	Ala	Glu	Lys	116
				165					170					175	
Phe	Arg	Ser	Asn	Gly	Val	Gln	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Met	Gly
			180					185					190		
G]u	Thr	Asp	Leu	Met	Leu	Ala	Ala	Leu	Arg	Thr	Leu	Val	Gly	He	Cys
		195					200					205			
Ser	Glu	His	Gln	Ser	Arg	Thr	Val	Ala	Thr	Leu	Ser	Tle	Len	Glv	Tha

	210					215					220				
Arg	Arg	Val	Val	Ser	He	Leu	Gly	Val	Glu	Ser	Gln	Ala	Val	Ser	Leu
225					230					235					240
Ala	Ala	Cys	His	Leu	Leu	Gln	Val	Met	Phe	Asp	Ala	Leu	Lys	Glu	Gly
				245					250					255	
Val	Lys	Lys	Gly	Phe	Arg	Gly	Lys	Glu	Gly	Ala	He	Пe	Va]	Asp	Pro
			260					265					270		
Ala	Arg	Glu	Leu	Lys	Val	Leu	Ile	Ser	Asn	Leu	Leu	Asp	Leu	Leu	Thr
		275					280					285			
Glu	Val	Gly	Val	Ser	Gly	Gln	G1 y	Arg	Asp	Asn	Ala	Leu	Thr	Leu	Leu
	290					295					300				
He	Lys	Ala	Val	Pro	Arg	Lys	Ser	Leu	Lys	Asp	Pro	Asn	Asn	Ser	Leu
305					310					315					320
Thr	Leu	Trp	Val	He	Asp	Gln	G1 y	Leu	Lys	Lys	11e	Leu	Glu	Val	Gly
				325					330					335	
Gly	Ser	Leu	Gln	Asp	Pro	Pro	G1 y	Glu	Leu	Ala	Val	Thr	Ala	Asn	Ser
			340					345					350		
Arg	Met	Ser	Ala	Ser	He	Leu	Leu	Ser	Lys	Leu	Phe	Asp	Asp	Leu	Lys
		355					360					365			
Cys	Asp	Ala	Glu	Arg	Glu	Asn	Phe	His	Arg	Leu	Cys	Glu	Asn	Tyr	He
	370					375					380				
Lys	Ser	Trp	Phe	Glu	Gly	Gln	Gly	Leu	Ala	Ģly	Lys	Leu	Arg	Ala	He
385					390					395					400
Gln	Thr	Val	Ser	Cys	Leu	Leu	Gln	Gly	Pro	Cys	Asp	Ala	Gly	Asn	Arg
				405					410					415	
Ala	Leu	Glu	Leu	Ser	Gly	Val	Met	Glu	Ser	Val	He	Ala	Leu	Cys	Ala
			420					425					430		
Ser	Glu	Gln	Glu	Glu	Glu	G1n	Leu	Val	Ala	Val	Glu	Ala	Leu	lle	His
		435					440					445			
Ala	Ala	Gly	Lys	Ala	Lys	Arg	Ala	Ser	Phe	He	Thr	Ala	Asn	G1 y	Val
	450					455					460				
Ser	Leu	Leu	Lys	Asp	Leu	Tyr	Lys	Cys	Ser	Glu	Lys	Asp	Ser	He	Arg
465					470					475					480
He	Arg	Ala	Leu	Val	Gly	Leu	Cys	Lys	Leu	Gly	Ser	Ala	Gly	Gly	Thr
				485					490					495	
Лsp	Phe	Ser	Met	Lys	Gln	Phe	Ala	Glu	Gly	Ser	Thr	Leu	Lys	Leu	Ala

				500					505					510		
l.	_ys	Gln	Cys	Arg	Lys	Trp	Leu	Cys	Asn	Asp	Gln	Пe	Asp	Ala	Gly	Thr
			515					520					525			
F	۱rg	Arg	Trp	Ala	Val	Glu	Gly	Leu	Ala	Tyr	Leu	Thr	Phe	Asp	Ala	Asp
		530					535					540				
١	/al	Lys	Glu	Glu	Phe	Val	G]u	Asp	Ala	Ala	Ala	Leu	Lys	Ala	Leu	Phe
5	545					550					555					560
(Gln	Leu	Ser	Arg	Leu	Glu	Glu	Arg	Ser	Val	Leu	Phe	Ala	Val	Ala	Ser
					565					570					575	
F	Ala	Leu	Val	Asn	Cys	Thr	Asn	Ser	Tyr	Asp	Tyr	Glu	Glu	Pro	Asp	Pro
				580					585					590		
l	.ys	Met	Val	Glu	Leu	Ala	Lys	Tyr	Ala	Lys	Gln	His	Val	Pro	Glu	Gln
			595					600					605			
}	lis	Pro	Lys	Asp	Lys	Pro	Ser	Phe	Val	Arg	Ala	Arg	Val	Lys	Lys	Leu
		610					615					620				
I	.eu	Ala	Ala	Gly	Val	Val	Ser	Ala	Met	Val	Cys	Met	Val	Lys	Thr	Glu
6	525					630					635					640
S	Ser	Pro	Val	Leu	Thr	Ser	Ser	Cys	Arg	Glu	Leu	Leu	Ser	Arg	Val	Phe
					645					650					655	
l	_eu	Ala	Leu	Val	Glu	Glu	Va]	Glu	Asp	Arg	Gly	Thr	Val	Val	Ala	Gln
				660					665					670		
(Gly	Gly	Gly	Arg	Ala	Leu	He	Pro	Leu	Ala	Leu	Glu	Gly	Thr	Asp	Val
			675					680					685			
(Gl y	Gln	Thr	Lys	Ala	Ala	Gln	Ala	Leu	Ala	Lys	Leu	Thr	lle	Thr	Ser
		690					695					700				
I	Asn	Pro	Glu	Met	Thr	Phe	Pro	Gly	Glu	Arg	He	Tyr	Glu	Val	Val	Arg
-	705					710					715					720
I	orc	Leu	Val	Ser	Leu	Leu	His	Leu	Asn	Cys	Ser	Gly	Leu	Gln	Asn	Phe
					725					730					735	
(Glu	Ala	Leu	Met	Ala	Leu	Thr	Asn	Leu	Ala	GIy	He	Ser	Glu	Arg	Leu
				740					745					750		
1	۱rg	GIn	Lys	He	Leu	Lys	Glu		Ala	Val	Pro	Met		Glu	Gly	Tyr
			755					760					765			
M	Met		Glu	Glu	His	Glu		He	Arg	Arg	Ala		Thr	Glu	Cys	Met
		770					775					780				_
-	200	Acr	Lau	Ale	Mat	Carr	1 110	C1	$V \sim 1$	Cln	Acn	1 011	Pho	G1n	A1 a	615

800 785 790 795 Gly Asn Asp Arg Leu Lys Leu Leu Val Leu Tyr Ser Gly Glu Asp Asp 810 Glu Leu Leu Gln Arg Ala Ala Ala Gly Gly Leu Ala Met Leu Thr Ser 830 820 Met Arg Pro Thr Leu Cys Ser Arg lle Pro Gln Val Thr Thr His Trp 840 845 Leu Glu Ile Leu Gln Ala Leu Leu Leu Ser Ser Asn Gln Glu Leu Gln 855 860 His Arg Gly Ala Val Val Leu Asn Met Val Glu Ala Ser Arg Glu 875 880 870 865 Ile Ala Ser Thr Leu Met Glu Ser Glu Met Met Glu Ile Leu Ser Val 890 885 Leu Ala Lys Gly Asp His Ser Pro Val Thr Arg Ala Ala Ala Ala Cys 900 905 910 Leu Asp Lys Ala Val Glu Tyr Gly Leu lle Gln Pro Asn Gln Asp Gly 925 915 920 Glu

<210> 3617

<211> 527

<212> PRT

<213> Homo sapiens

<400> 3617

Met Glu Cys Leu Cys Ala His Pro Pro Ala Gly Leu Gln His Leu Gly

1 5 10 15

Leu Gly His Asn Lys Leu Leu Gly Pro Leu Glu Ser Leu Tyr Val Thr
20 25 30

Ala Asn His Trp Gly Arg Val Arg Leu Gly Leu Gly Asp Ala Val Leu 35 40 45

Thr Ala Ala Ala Cys Val Phe Leu Leu Phe Ser Glu Leu Arg Ser 11e 50 55 60

Cys Phe Leu Val Cys Gly Ser Arg Leu Leu Ala Pro Cys Ser Pro Gly

65					70					75					80
Phe	Leu	Thr	Pro	Arg	Arg	Ser	Cys	Ser	Pro	Ser	Arg	Pro	Asn	Leu	Val
				85					90					95	
Ser	Leu	Asp	Leu	Gly	Phe	Asn	Asp	Leu	Thr	Asp	Leu	Gln	Ser	Met	Val
			100					105					110		
Thr	Ser	Leu	Arg	Thr	Leu	Arg	His	Leu	Arg	Leu	Leu	Val	Leu	Lys	Gly
		115					120					125			
Asn	Pro	Leu	.Ala	Leu	Val	Pro	Tyr	Tyr	Arg	Gly	Leu	Thr	lle	Лsp	Ser
	130					135					140				
Leu	Ala	Gln	Leu	Cys	Val	Leu	Asp	Asp	lle	Thr	Val	Ser	Pro	Asn	Glu
145					150					155					160
Lys	llis	Leu	Phe	Arg	Gly	Leu	Ser	Leu	Asn	Gly	Asp	Leu	Leu	Ala	Gln
				165					170					175	
Glu	Ala	Gln	Phe	Val	Val	Thr	He	Gly	Asn	Пе	Arg	Gly	Val	Leu	Asp
			180					185					190		
Thr	Ser	Val	Leu	Asp	Pro	Glu	Pro	Arg	Pro	Glu	Gly	Pro	Phe	lle	Thr
		195					200					205			
Tyr	Asn	Tyr	Tyr	Val	Thr	Tyr	Asp	Phe	Val	Lys	Asp	Glu	Glu	Gly	Glu
	210					215					220				
Met	Asn	Glu	Ser	Ala	Gly	Val	Leu	Ala	Glu	He	Val	Lys	Pro	Ser	Pro
225					230					235					240
Ser	Leu	Glu	Leu	Leu	Val	Glu	Glu	Ser	Pro	Glu	Glu	Val	Val	Glu	Asp
				245					250		•			255	
Val	He	G]u		He	Va]	Glu	Glu		Thr	G] u	Glu	Val		GI y	Ser
			260					265					270		
Leu	Glu		Glu	Val	Glu	Glu		Gly	Glu	Ser	Glu		Ser	Val	lle
		275	_				280					285			
Ser		Pro	Ser	Thr	lle		Gln	Met	Pro	Arg		Ser	Ala	Glu	Glu
	290					295			1.		300		15		10
	Λla	Lys	Leu	Arg		Arg	He	Asp	Pro		Leu	Cys	Pro	Ser	
305	m,			D1	310	m.		11.	,	315	7.		61		320
Gly	lhr	Val	Leu		Ser	lhr	Ala	HIS		Pro	ırp	Ala	6] u	Val	He
D	C	C	т.	325	Mara	C1	11.	C -	330	Λ	Λ	1	V . 1	335	1
rro	Cys	261.		GIU	Met	61n	HIS		Leu	Arg	ASP	Leu		Pro	Leu
1	A 1	Di-	340	1	АТ.	C1.	T) -	345	Vie 1	TI	11.	V1	350	C1.	1
Lys	ATA	rne	Leu	ren	W19	огу	ınr	ınr	vai	TIII,	116	1.12.4	o10	Glu	LVS

lle Leu Ser Trp Pro Val Val Leu Pro Ala Val Asp Ser Pro Leu Ser Ala Lys Lys Gly Lys Gly Glu Lys Asp Lys Lys Gly Lys Glu Lys Asp Arg Thr Gly Lys Gly Glu Lys Glu Pro Ala Lys Glu Trp Lys Val Leu Lys Lys Lys Glu Pro Pro Lys Glu Leu Arg Gln Asn Pro Pro 11e Leu Gln Val Leu Gly Arg Gly Leu Val 11e Leu Glu Pro Leu Leu Ala Gly Glu Pro Leu Val Ser Thr Val Cys Asn Phe Gly Val Val Arg Thr Leu Thr Ser Asp Arg Leu Thr Leu Ala Arg Asp Ser Lys Lys lle Lys Lys Val Ala Lys Lys Glu Lys Pro Lys Ala Val Ile Pro Ile Tyr Glu Gly Asp Tyr His Pro Glu Pro Leu Thr Val Glu Val Gln Ile Gln Leu Asn Gln Cys Arg Ser Ala Glu Glu Ala Leu Arg Met Phe Ala Val

<210> 3618

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3618

 Met Arg Lys Ala Tyr
 Ser Pro Leu Gln Val Leu Arg Gly Cys Leu Leu

 1
 5

 Leu Pro Ser Leu Leu His Ala Leu Ser Leu Gln Glu Gln Pro Met Val

 20
 25

 30

 Trp Pro Leu Thr Arg Gly Pro Ser Ser Ala Ser Asp Ala Leu Ser Ser

 35

 40

 45

Lys lle Pro Arg Gln Arg lle Met Asp Tyr Tyr Glu Thr Asn Ser Gln Cys Ser Lys Pro Gly Ile Val Phe Ile Thr Lys Arg Gly His Ser Val Cys Thr Asn Pro Ser Asp Lys Trp Val Gln Asp Tyr Ile Lys Asp Met Lys Glu Asn <210> 3619 <211> 528 <212> PRT <213> Homo sapiens <400> 3619 Met Ala Ala Tyr Gln Gln Glu Gln Met Gln Leu Pro Arg Ala Asp Ala Ile Arg Ser Arg Leu Ile Asp Thr Phe Ser Leu Ile Glu His Leu Gln Gly Leu Ser Gln Ala Val Pro Arg His Thr 11e Arg Glu Leu Leu Asp Pro Ser Arg Gln Lys Lys Leu Ile Leu Gly Asp Gln His Gln Leu Val Arg Phe Ser Ile Lys Pro Gln Arg Ile Glu Gln 11e Ser His Ala Gln Arg Leu Leu Ser Arg Leu His Val Arg Cys Ser Gln Arg Pro Pro Leu Ser Leu Trp Ala Gly Trp Val Leu Glu Cys Pro Leu Phe Lys Asn Phe lle lle Phe Leu Val Phe Leu Asn Thr lle lle Leu Met Val Glu lle Glu Leu Leu Glu Ser Thr Asn Thr Lys Leu Trp Pro Leu Lys Leu

Thr	Leu	Glu	Val	Ala	Ala	Trp	Phe	lle	Leu	Leu	lle	Phe	lle	Leu	Glu
145					150					155					160
lle	Leu	Leu	Lys	Trp	Leu	Ser	Asn	Phe	Ser	Val	Phe	Trp	Lys	Ser	Ala
				165					170					175	
Trp	Asn	Val	Phe	Asp	Phe	Val	Val	Thr	Met	Leu	Ser	Leu	Leu	Pro	Glu
			180					185					190		
Val	Val	Val	Leu	Val	Gly	Val	Thr	Gly	Gln	Ser	Val	Trp	Leu	Gln	Leu
		195					200					205			
Leu	Arg	He	Cys	Arg	Val	Leu	Arg	Ser	Leu	Lys	Leu	Leu	Ala	Gln	Phe
	210					215					220				
Arg	Gln	lle	Gln	Ile	He	He	Leu	Va]	Leu	Val	Arg	Ala	Leu	Lys	Ser
225					230					235					240
Met	Thr	Phe	Leu	Leu	Met	Leu	Leu	Leu	lle	Phe	Phe	Tyr	He	Phe	Ala
				245					250					255	
Val	Thr	Gly	Val	Tyr	Val	Phe	Ser	Glu	Tyr	Thr	Arg	Ser	Pro	Arg	Gln
			260					265					270		
Asp	Leu	Glu	Tyr	His	Val	Ser	Phe	Ser	Asp	Leu	Pro	Asn	Ser	Leu	Val
		275					280					285			
Thr	Val	Phe	He	Leu	Phe		Leu	Asp	His	Trp	Tyr	Ala	Leu	Leu	Gln
	290					295					300				
Asp	Val	Trp	Lys	Val		Glu	Val	Ser	Arg		Phe	Ser	Ser	lle	
305					310					315					320
Phe	He	Leu	Trp		Leu	Leu	Gly	Ser		He	Phe	Arg	Ser		He
				325					330			_		335	
Val	Ala	Met		Val	Thr	Asn	Phe		Asn	He	Arg	Lys		Leu	Λsn
			340					345					350	D1	
Glu	Glu	Met	Ala	Arg	Arg	Glu		GIn	Leu	Lys	Ala		Met	Phe	Lys
		355					360					365			æ.
Arg		He	He	GIn	Arg		Lys	Asn	Met	Ser		61u	Ala	Leu	Thr
	370				~ 1	375			0.1		380	0.1	6 3		0.1
	Ser	His	Ser	Lys		Glu	Asp	Arg	Gly		Ser	GIn	GIn	Arg	
385	•		,		390	., .	0	6.1	,, .	395	C		T	63	400
Ser	Leu	Asp	Leu		Glu	Val	Ser	Glu		Glu	Ser	Asn	lyr		Ala
	٥.			405			~		410		m.	0.3	6.7	415	
Thr	Glu	Glu		Leu	He	Thr	Ser		Ser	Lys	Thr	Glu		lhr	Leu
			420					425					430		

Ser Lys Lys Arg Glu Tyr Gln Ser Ser Pro Cys Val Ser Ser Thr Ser Ser Ser Tyr Ser Ser Ser Ser Glu Ser Arg Phe Ser Glu Ser lle Gly

Arg Leu Asp Trp Glu Thr Leu Val His Glu Asn Leu Pro Gly Leu Met Glu Met Asp Gln Asp Asp Arg Val Trp Pro Arg Asp Ser Leu Phe Arg Tyr Phe Glu Leu Leu Glu Lys Leu Gln Tyr Asn Leu Glu Glu Arg Lys Lvs Leu Gln Glu Phe Ala Val Gln Ala Leu Met Asn Leu Glu Asp Lys

<210> 3620

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3620

Met Phe Arg Leu Trp Leu Leu Leu Ala Gly Leu Cys Gly Leu Leu Ala

Ser Arg Pro Gly Phe Gln Asn Ser Leu Leu Gln 11e Val 11e Pro Glu

Lys lle Gln Thr Asn Thr Asn Asp Ser Ser Glu Ile Glu Tyr Glu Gln

lle Ser Tyr lle lle Pro lle Asp Glu Lys Leu Tyr Thr Val His Leu

Lys Gln Arg Tyr Phe Leu Ala Asp Asn Phe Met Ile Tyr Leu Tyr Asn

Gln Gly Ser Met Asn Thr Tyr Ser Ser Asp lle Gln Thr Gln Cys Tyr

Tyr Gln Gly Asn lle Glu Gly Tyr Pro Asp Ser Met Val Thr Leu Ser

Thr Cys Ser Gly Leu Arg Gly 11e Leu Gln Phe Glu Asn Val Ser Tyr

Gly 11e Glu Pro Leu Glu Ser Ala Val Glu Phe Gln His Val Leu Tyr Lys Leu Lys Asn Glu Asp Asn Asp Ile Ala Ile Phe Ile Asp Arg Ser Leu Lys Glu Gln Pro Met Asp Asp Asn Ile Phe Ile Ser Glu Lys Ser Glu Pro Ala Val Pro Asp Leu Phe Pro Leu Tyr Leu Glu Met His Ile Val Val Asp Lys Thr Leu Tyr Asp Tyr Trp Gly Ser Asp Ser Met Ile Val Thr Asn Lvs Val 11e Glu 11e Val Gly Leu Ala Asn Ser Met Phe Thr Gln Phe Lys Val Thr Ile Val Leu Ser Ser Leu Glu Leu Trp Ser Asp Glu Asn Lys Ile Ser Thr Val Gly Glu Ala Asp Trp Arg Glu Met Lys Ser Val Ile Val Val Leu Arg Leu Asn Val Asp Leu Gln Ala Val Val Ile Phe Glu Leu Val Tyr <210> 3621 <211> 161 <212> PRT <213> Homo sapiens

<400> 3621
Met lle Ser Val Val Leu Cys Trp Glu Glu Glu Thr Ala Gly Asn His
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Arg Lys Leu Val Gln Gly Ala Pro Met Lys Lys Ser Gln Ala Arg Leu
20 25 30
Leu Arg Arg Arg Gly Pro Gly Asn Pro Thr Pro Gly Phe Pro Leu Gly
35 40 45
Val Gly Gln Ser Gln Leu Gln Asp Pro Ala Thr Ala Ala Arg Phe Pro

50 55 Glu Cys Trp Arg Ser Pro Leu Arg Gly Arg Gly Arg Ala Leu Ser Ser 75 70 Arg Thr Arg Ala Pro Pro Pro Arg Pro Gly Pro Leu Thr Val Glu Ala 90 Phe IIIs Leu Trp Leu Leu Ala Leu Gly Leu Leu Gln Pro Leu Gly 100 105 Phe Ala Ala Leu Leu Ala Val Glu His Glu Ala Gln His Gly Asn Asp 120 125 Val Gly His Ser Gly Thr His Arg Gln Pro Asn Gly Leu Asp His Leu 135 130 140 Val Gly Gly Arg Ala Ala Arg Ala Leu Arg Leu Leu Arg His Arg Leu 145 150 155 160 Val

<210> 3622

<211> 514

<212> PRT

<213> Homo sapiens

<400> 3622

Met Gly Asp Trp Asn Leu Leu Gly Asp Thr Leu Glu Glu Val His Ile

1 5 10 15

His Ser Thr Met Ile Gly Lys Ile Trp Leu Thr Ile Leu Phe Ile Phe
20 25 30

Arg Met Leu Val Leu Gly Val Ala Ala Glu Asp Val Trp Asn Asp Glu
35 40 45

Gln Ser Gly Phe 11e Cys Asn Thr Glu Gln Pro Gly Cys Arg Asn Val 50 55 60

Cys Tyr Asp Gln Ala Phe Pro 11e Ser Leu 11e Arg Tyr Trp Val Leu 65 70 75 80

Gln Val Ile Phe Val Ser Ser Pro Ser Leu Val Tyr Met Gly His Ala 85 90 95

Leu Tyr Arg Leu Arg Val Leu Glu Glu Glu Arg Gln Arg Met Lys Ala

			100					105					110		
Gln	Leu	Arg	Val	Glu	Leu	Glu	Glu	Val	Glu	Phe	Glu	Met	Pro	Arg	Лsp
		115					120					125			
Arg	Arg	Arg	Leu	Glu	Gln	Glu	Leu	Cys	Gln	Leu	Glu	Lys	Arg	Lys	Leu
	130					135					140				
Asn	Lys	Ala	Pro	Leu	Arg	Gly	Thr	Leu	Leu	Cys	Thr	Tyr	Val	Пe	His
145					150					155					160
lle	Phe	Thr	Arg	Ser	Val	Val	Glu	Va]	Gly	Phe	Met	Пe	Gly	Gln	Tyr
				165					170					175	
Leu	Leu	Tyr	Gly	Phe	His	Leu	Glu	Pro	Leu	Phe	Lys	Cys	His	Gly	His
			180					185					190		
Pro	Cys	Pro	Asn	lle	He	Asp	Cys	Phe	Val	Ser	Arg	Pro	Thr	Glu	Lys
		195					200					205			
Thr	He	Phe	Leu	Leu	Phe	Met	Gln	Ser	He	Ala	Thr	11e	Ser	Leu	Phe
	210					215					220				
Leu	Asn	He	Leu	Glu	He	Phe	His	Leu	Gly	Phe	Lys	Lys	He	Lys	Arg
225					230					235					240
Gly	Leu	Trp	Gly	Lys	Tyr	Lys	Leu	Lys	Lys	Glu	His	Asn	Glu	Phe	His
				245					250					255	
Ala	Asn	Lys	Ala	Lys	Gln	Asn	Val	Ala	Lys	Tyr	Gln	Ser	Thr	Ser	Ala
			260					265					270		
Asn	Ser	Leu	Lys	Arg	Leu	Pro	Ser	Ala	Pro	Asp	Tyr	Asn	Leu	Leu	Va]
		275					280					285			
Glu	Lys	Gln	Thr	His	Thr	Ala	Val	Tyr	Pro	Ser	Leu	Asn	Ser	Ser	Ser
	290					295					300				
Val	Phe	Gln	Pro	Asn	Pro	Asp	Asn	His	Ser	Val	Asn	Asp	Glu	Lys	Cys
305					310					315					320
He	Leu	Asp	G]u	Gln	Glu	Thr	Va]	Leu	Ser	Asn	Glu	11e	Ser	Thr	Leu
				325					330					335	
Ser	Thr	Ser	Cys	Ser	His	Phe	Gln	His	lle	Ser	Ser	Asn	Asn	Asn	Lys
			340					345					350		
Asp	Thr	His	Lys	He	Phe	Gly	Lys	Glu	Leu	Asn	Gly	Asn	Gln	Leu	Met
		355					360					365			
Glu	Lys	Arg	Glu	Thr	G1u	Gly	Lys	Asp	Ser	Lys	Arg	Asn	Tyr	Tyr	Ser
	370					375					380				
Ana	G1v	Hic	Arc	San	110	Dro	C1v	Val	410	TIC	Acr	61v	G1n	Acr	Acn

Met Arg Gln Ser Pro Gln Thr Val Phe Ser Leu Pro Ala Asn Cys Asp Trp Lys Pro Arg Trp Leu Arg Ala Thr Trp Gly Ser Ser Thr Glu His Glu Asn Arg Gly Ser Pro Pro Lys Val Pro Gly Ser Lys Ala Thr Ala Ser Ser Leu Leu lle Leu Gln Arg Pro Thr Ser Ser Gln Pro Arg Leu Lys Glu Thr Pro Lys Ile Lys Ala Glu Ala Lys Ile Tyr Asp Ser Lvs His Pro Pro Gln Leu Leu Gln Ser Thr Val Ser Thr Phe Ser Gly Arg Glu Pro Arg Ser Pro Ala Pro Met Gly His His Ser Phe Arg Gly Pro Arg

<210> 3623

<211> 345

<212> PRT

<213> Homo sapiens

<400> 3623

Met Ser Glu Asn Glu Leu Asp Thr Thr Leu His Leu Lys Cys Lys Leu Gly Met Lys Ser Ile Leu Pro Ile Phe Arg Cys Leu Asn Ser Leu Glu Arg Asn Ile Glu Lys Cys Arg Ile Phe Thr Arg Ser Asp Lys Cys Lys Val Val Ile Gln Phe Phe Tyr Arg His Gly Ile Lys Arg Thr His Asn lle Cys Phe Gln Glu Ser Gln Pro Leu Gln Val lle Phe Asp Lys Asn

Val Cys Thr Asn Thr Leu Met 11e Gln Pro Arg Leu Leu Ala Asp Ala

				85					90					95	
lle	Val	Leu	Phe	Thr	Ser	Ser	Gln	Glu	Glu	Val	Thr	Leu	Ala	Val	Thr
			100					105					110		
Pro	Leu	Asn	Phe	Cys	Leu	Lys	Ser	Ser	Asn	Glu	Glu	Ser	Met	Asp	Leu
		115					120					125			
Ser	Asn	Ala	Val	His	Ser	Glu	Met	Phe	Val	Gly	Ser	Asp	Glu	Phe	Asp
	130					135					140				
Phe	Phe	Gln	lle	Gly	Met	Asp	Thr	Glu	11e	Thr	Phe	Cys	Phe	Lys	Glu
145					150					155					160
Leu	Lys	Gly	Hle	Leu	Thr	Phe	Ser	Glu	Ala	Thr	His	Ala	Pro	He	Ser
				165					170					175	
He	Tyr	Phe	Asp	Phe	Pro	Gl y	Lys	Pro	Leu	Ala	Leu	Ser	He	Asp	Asp
			180					185					190		
Met	Leu	Val	Glu	Ala	Asn	Phe	He	Leu	Ala	Thr	Leu	Ala	Asp	Glu	Gln
		195					200	•				205			
Ser	Arg	Ala	Ser	Ser	Pro	Gln	Ser	Leu	Cys	Leu	Ser	Gln	Lys	Arg	Lys
	210					215					220				
Arg	Ser	Asp	Leu	lle	Glu	Lys	Lys	Ala	Gly	Lys	Asn	Val	Thr	G1 y	Gln
225					230					235					240
Ala	Leu	Glu	Cys	lle	Ser	Lys	Lys	Ala	Ala	Pro	Arg	Arg	Leu	Tyr	Pro
				245					250					255	
Lys	Glu	Thr	Leu	Thr	Asn	He	Ser	Ala	Leu	G]u	Asn	Cys	Gly	Ser	Pro
			260					265					270		
Ala	Met	Lys	Arg	Va]	Asp	Gly	Asp	Val	Ser	Glu	Val	Ser	Glu	Ser	Ser
		275					280					285			
Val	Ser	Asn	Thr	Glu	Glu	Val	Pro	Gly	Ser	Leu	Cys	Leu	Arg	Lys	Phe
	290					295					300				
Ser	Cys	Met	Phe	Phe	Gly	Ala	Va]	Ser	Ser	Asp	Gln	Gln	Glu	His	Phe
305					310					315					320
Asn	His	Pro	Phe	Asp	Ser	Leu	Ala	Arg	Ala	Ser	Asp	Ser	Glu	Glu	Asp
				325					330					335	
Met	Asn	Asn	Gly	Ser	Phe	Ser	He	Phe							
			340					345							

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<211> 718
<212> PRT
<213> Homo sapiens
<400> 3624
Met Val Gly Lys Ser Gln Gln Thr Asp Val Ile Glu Lys Lys His
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                                     10
Met Ala Ile Pro Lys Ser Ser Ser Pro Lys Ala Thr His Arg Ile Gly
                                 25
Asn Thr Ser Gly Ser Lys Gly Ser Tyr Ser Ala Lys Ala Tyr Glu Ser
         35
                             40
                                                 45
He Arg Val Ser Ser Glu Leu Gln Gln Thr Trp Thr Lys Arg Lys His
                         55
Gly Gln Glu Met Thr Ser Lys Ser Leu Gln Thr Asp Thr 11e Val Glu
65
                     70
Glu Lys Lys Glu Val Lys Leu Val Glu Glu Thr Val Val Pro Glu Glu
                 85
                                     90
Lys Ser Ala Asp Val Arg Glu Ala Ala Ile Glu Leu Pro Glu Ser Val
                                105
                                                    110
Gln Asp Val Glu Ile Pro Pro Asn Ile Pro Ser Val Gln Leu Lys Met
                            120
       115
                                                125
Asp Arg Ser Gln Gln Thr Ser Arg Thr Gly Tyr Trp Thr Met Met Asn
                        135
lle Pro Pro Val Glu Lys Val Asp Lys Glu Gln Gln Thr Tyr Phe Ser
145
                    150
                                        155
                                                            160
Glu Ser Glu IIe Val Val IIe Ser Arg Pro Asp Ser Ser Ser Thr Lys
                                    170
                165
Ser Lys Glu Asp Ala Leu Lys His Lys Ser Ser Gly Lys Ile Phe Ala
                                                    190
                                185
Ser Glu His Pro Glu Phe Gln Pro Ala Thr Asn Ser Asn Glu Glu Ile
                                                205
        195
                            200
Gly Gln Lys Asn 11e Ser Arg Thr Ser Phe Thr Gln Glu Thr Lys Lys
                        215
Gly Pro Pro Val Leu Leu Glu Asp Glu Leu Arg Glu Glu Val Thr Val
225
                    230
                                        235
                                                            240
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Pro Val Val Glu Glu Gly Ser Ala Val Lys Lys Val Ala Ser Ala Glu

				245					250					255	
He	Glu	Pro	Pro	Ser	Thr	Glu	Lys	Phe	Pro	Ala	Lys	He	Gln	Pro	Pro
			260					265					270		
Leu	Val	Glu	Glu	Ala	Thr	Ala	Lys	Ala	Glu	Pro	Arg	Pro	Ala	Glu	Glu
		275					280					285			
Thr	His	Val	Gln	Val	Gln	Pro	Ser	Thr	Glu	Glu	Thr	Pro	Asp	Ala	Glu
	290					295					300				
Ala	Ala	Thr	Ala	Val	Ala	Glu	Asn	Ser	Val	Lys	Val	Gln	Pro	Pro	Pro
305					310					315					320
Ala	Glu	Glu	Ala	Pro	Leu	Val	Glu	Phe	Pro	Ala	Glu	11e	Gln	Pro	Pro
				325					330					335	
Ser	Ala	Glu	Glu	Ser	Pro	Ser	Val	Glu	Leu	Leu	Ala	Glu	He	Leu	Pro
			340					345					350		
Pro	Ser	Ala	Glu	Glu	Ser	Pro	Ser	Glu	Glu	Pro	Pro	Ala	Glu	He	Leu
		355					360					365			
Pro	Pro	Pro	Ala	Glu	Lys	Ser	Pro	Ser	Val	Glu	Leu	Leu	G1y	Glu	He
	370					375					380				
Arg	Ser	Pro	Ser	Ala	Gln	Lys	Ala	Pro	Ile	Glu	Val	Gln	Pro	Leu	Pro
385					390					395					400
Ala	Glu	Gly	Ala	Leu	Glu	Glu	Ala	Pro	Ala	Lys	Val	Glu	Pro	Pro	Thr
				405					410					415	
Val	G]u	Glu	Thr	Leu	Ala	G]u	Val	Gln	Pro	Leu	Leu	Pro	Glu	Glu	Ala
			420					425					430		
Pro	Arg	Glu	Glu	Ala	Arg	Glu	Leu	Gln	Leu	Ser	Thr	Ala	Met	Glu	Thr
		435					440					445			
Pro	Ala	Glu	Glu	Ala	Pro	Thr	Glu	Phe	Gln	Ser	Pro	Leu	Pro	Lys	Glu
	450					455					460				
Thr	Thr	Ala	Glu	Glu	Ala	Ser	Ala	Glu	lle	Gln	Leu	Leu	Ala	Ala	Thr
465					470					475					480
Glu	Ala	Ser	Ala	Glu	Glu	Ala	Pro	Ala	Glu	Val	Gln	Pro	Pro	Pro	Ala
				485					490					495	
Glu	Glu	Ala	Pro	Ala	Glu	Val	Gln	Pro	Pro	Pro	Ala	Glu	Glu	Ala	Pro
			500					505					510		
Ala	Głu	Val	Gln	Pro	Pro	Pro	Ala	Glu	Glu	Ala	Pro	Ala	Glu	Val	Gln
		515					520					525			
Pro	Pro	Pro	Ala	Glu	Glu	Ala	Pro	Ala	Glu	Val	Gln	Pro	Pro	Pro	Ala

Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro Ser Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln Ser Leu Pro Ala Glu Glu Thr Pro lle Glu Glu Thr Leu Ala Ala Val His Ser Pro Pro Ala Asp Asp Val Pro Ala Glu Glu Ala Ser Val Asp Lys His Ser Pro Pro Ala Asp Leu Leu Leu Thr Glu Glu Phe Pro Ile Gly Glu Ala Ser Ala Glu Val Ser Pro Pro Pro Ser Glu Gln Thr Pro Glu Asp Glu Ala Leu Val Glu Asn Val Ser Thr Glu Phe Gln Ser Pro Gln Val Ala Gly lle Pro Ala Val Lys Leu Gly Ser Val Val Leu Glu Gly Glu Ala Lys Phe Glu Glu Val Ser Lys Ile Asn Ser Val Leu Lys Asp Leu Ser Asn Thr Asn Asp Gly Gln Ala Pro Thr Leu Glu Ile Glu Ser Val Phe His Ile Glu Leu Lys Gln Arg Pro Pro Glu Leu

<210> 3625

<211> 219

<212> PRT

<213> Ilomo sapiens

<400> 3625

Met Gly Val Val Pro Val Scr Tyr Phe 11e Arg Asn Met Glu Glu Scr 1 5 10 15

Tyr Val Asn Leu Asn His His Gly Leu Gly Pro Arg Gly Thr Lys Ala 20 25 30

Ile Ala Ile Ala Leu Val Ser Asn Met Ala Val Thr Lys Leu Glu Leu 40 Glu Asp Asn Cys lle Met Glu Glu Gly Val Leu Ser Leu Val Glu Met 60 55 Leu Gln Glu Asn Tyr Tyr Leu Gln Glu Met Asn Ile Ser Asn Asn His 70 75 65 Leu Gly Leu Glu Gly Ala Arg 11e 11e Ser Asp Phe Phe Glu Arg Asn 85 90 Ser Ser Ser Ile Trp Ser Leu Glu Leu Ser Gly Asn Asp Phe Lys Glu 100 105 110 Asp Ser Ala Ala Leu Leu Cys Gln Ala Leu Ser Thr Asn Tyr Gln Ile 120 Lys Lys Leu Asp Leu Ser His Asn Gln Phe Ser Asp Val Gly Gly 135 His Leu Gly Gln Met Leu Ala Ile Asn Val Gly Leu Thr Ser Leu Asp 145 150 155 160 Leu Ser Trp Asn Asn Phe His Thr Arg Gly Ala Val Ala Leu Cys Asn 165 170 Gly Leu Arg Gly Lys Ser Ser Asp Ser Thr Ala Ala Trp Ser Thr Trp 180 185 190 lle Ser Val Ala Met Thr Ser Ala Met Lys Gly Pro Pro Lys Ser Ala 200 195 205 Lys Asp Trp Asn Pro Met Lys Ala Ser Glu Phe 210 215

<210> 3626

<211> 563

<212> PRT

<213> Homo sapiens

<400> 3626

Met 11e Lys Arg Lys 11e Trp Cys Asn Leu Cys 11e Asp Leu Val Ala 1 5 10 15

Phe Thr Ser Glu 11e Phe Lys Gly Ala Val Phe Gln Ser Leu Asp Gly

20 25 30

lle	Val		Ser	Ala	Asn	Cys	Lys	Leu	Arg	Lys	He		Thr	Leu	Lys
		35					40					45			
Ser	Lys	Pro	Gln	Asp	Thr	Ala	Asp	Lys	Asp	Ala	Val	Tyr	Gly	Val	Pro
	50					55					60				
Phe	Ser	Thr	Asp	Glu	Pro	Thr	Asp	11e	He	Pro	Arg	Ser	Cys	G1n	Leu
65					70					75					80
Met	Thr	Asp	Val	Pro	His	Val	Thr	Gln	Leu	Leu	Asn	Met	Thr	Lys	Leu
				85					90					95	
Arg	Gln	Thr	Glu	He	Lys	Phe	Gly	Gly	His	Pro	Leu	Arg	Ser	Ala	Glu
			100					105					110		
Ser	Asp	Gln	Phe	He	Asn	Arg	Gly	Thr	Ser	11e	Thr	Arg	Asn	Ser	Lys
		115					120					125			
Asn	Gln	Asp	Val	Cys	His	He	Ala	Phe	Gly	Ser	Lys	Val	Leu	Gly	Pro
	130					135					140				
Pro	Pro	Leu	Ser	Gly	Arg	Arg	Asn	Asn	Met	Lys	He	Ser	Ser	Glu	Thr
145					150.					155					160
Val	Arg	Ser	Val	Gly	Ser	Lys	Asn	Asn	Arg	Ser	Cys	Gln	Pro	Ser	Thr
				165					170					175	
Val	Glu	Lys	Cys	Val	Asn	Gly	Thr		Met	Ser	Ala	Leu	Leu	He	Pro
			180					185					190		
Glu	Ser	Glu	G] u	Gln	Gly	Asn		Glu	Asn	He	His		lle	Lys	Gln
		195					200					205			
Thr	Val	Pro	lle	His	Ala		Asn	Leu	His	He		His	Pro	His	Pro
	210					215					220				
	Gln	Glu	P.ro	Ser		Asp	Lys	Asn	Asn		Arg	Arg	Arg	Leu	
225					230					235					240
Leu	Lys	Ser	Thr		Arg	Glu	Arg	Thr		Thr	Pro	Ser	Gly		Ser
				245					250					255	
Ser	Gly	Asn		Arg	He	Glu	Asp		Ala	Ser	Thr	He		Thr	Thr
	_		260					265		_	2.7		270		
Val	Ser		Gln	Gly	Ala	Glu		Leu	Asn	Ser	Gly		Leu	Gly	Pro
		275					280					285			
Gln	Ser	Pro	Asp	Gln	Ser		Glu	Trp	He	Phe		Glu	Asn	Ala	Asp
	290					295	_				300				
	He	Ser	Tyr	Leu		Ser	Ser	Arg	Gln		Leu	Leu	Leu	Gly	
305					310					315					320

Asp	Ser	Cys	Asn	Pro	Ser	His	Leu	Trp	Leu	Glu	Ala	Ser	Lys	Glu	Ser
				325					330					335	
Glu	His	Asp	GIn	G1n	Ala	G] u	Glu	Ser	Gln	Ser	Val	Pro	Lys	Asp	Пe
			340					345					350		
Phe	Thr	Phe	Ser	Ser	Arg	Pro	Arg	Ser	Ala	Pro	His	Gly	Lys	Thr	Gln
		355					360					365			
Thr	Met	Ser	Pro	Glu	Glu	Leu	Ser	Phe	He	Leu	Asp	Leu	Lys	Glu	Asp
	370					375					380				
Asn	Ser	Val	Thr	Ser	Arg	Asp	Thr	Gln	Ser	Glu	Asp	Asp	Phe	Tyr	G1 y
385					390					395					400
Gly	Asp	Ser	Ser	Glu	Glu	Glu	Tyr	Asp	Trp	Arg	Asn	Tyr	Gln	Pro	Ser
				405					410					415	
Gln	Met	Ser	Glu	Ser	Glu	Leu	Gln	Met	Leu	Лlа	Ser	Leu	Arg	Trp	Gln
			420					425					430		
Gln	Asn	Glu	Glu	Leu	Glu	Asp	Ala	Gly	Thr	Ser	His	Gly	Leu	Ser	Ala
		435					440					445			
Ser	Gln	Val	Asp	Asn	Cys	Asn	Val	Ser	He	Ser	Thr	Ser	Ser	Λsp	Asp
	450					455					460				
Thr	Thr	Thr	Trp	Asn	Ser	Cys	Leu	Pro	Pro	Pro	Val	Asn	Gln	Gly	Arg
465					470					475					480
His	Tyr	Gln	Lys	Glu	Met	Asn	Pro	Pro	Ser	Pro	Ser	Asn	Pro	Arg	Asp
				485					490					495	
Trp	Leu	Asn	Met	Leu	Ser	Pro	Pro	He	Val	Pro	Pro	Ser	Gln	Gln	Pro
			500					505					510		
Ala	Glu	Gln	Arg	Pro	Asp	Ser	Cys	Glu	Ser	Leu	Ser	Val	GIn	Gly	Glu
		515					520					525			
Glu	Asp	Leu	Ser	Va]	Glu	Glu	Asp	Glu	Glu	Val	Leu	Thr	Leu	Leu	Tyr
	530					535					540				
Asp	Pro	Cys	Leu	Asn	Cys	Tyr	Phe	Asp	Pro	Gln	Thr	G] y	Lys	Tyr	Tyr
545					550					555					560
${\sf Glu}$	Leu	Val													

<210> 3627

<211> 512

<212> PRT <213> Homo sapiens <400> 3627 Met Asn Val Arg 11e Asp Pro Ser Ser Leu Ser Phe Asn Met Trp Lys Glu lle Pro lle Pro Phe Tyr Leu Ser Val Tyr Phe Phe Asp Val Met Asn Pro Ser Glu Ile Leu Lys Gly Glu Lys Pro Gln Val Arg Glu Arg Gly Pro Tyr Val Tyr Arg Glu Phe Arg His Lys Ser Asn lle Thr Phe Asn Asn Asn Asp Thr Val Ser Phe Leu Glu Tyr Arg Thr Phe Gln Phe Gln Pro Ser Lys Ser His Gly Ser Glu Ser Asp Tyr Ile Val Met Pro Asn Ile Leu Val Leu Gly Ala Ala Val Met Met Glu Asn Lys Pro Met Thr Leu Lys Leu Ile Met Thr Leu Ala Phe Thr Thr Leu Gly Glu Arg Ala Phe Met Asn Arg Thr Val Gly Glu lle Met Trp Gly Tyr Lys Asp Pro Leu Val Asn Leu lle Asn Lys Tyr Phe Pro Gly Met Phe Pro Phe Lys Asp Lys Phe Gly Leu Phe Ala Glu Leu Asn Asn Ser Asp Ser Gly Leu Phe Thr Val Phe Thr Gly Val Gln Asn lle Ser Arg lle His Leu Val Asp Lys Trp Asn Gly Leu Ser Lys Val Asp Phe Trp His Ser Asp Gln Cys Asn Met lle Asn Gly Thr Ser Gly Gln Met Trp Pro Pro Phe

225 230 235 240

Ser Met Lys Leu Met Tyr Lys Glu Ser Gly Val Phe Glu Gly Ile Pro
245 250 250 255

Met Thr Pro Glu Ser Ser Leu Glu Phe Tyr Ser Pro Glu Ala Cys Arg

Thr	Tyr	Arg	Phe	Val	Ala	Pro	Lys	Thr	Leu	Phe	Ala	Asn	Gly	Ser	He
			260					265					270		
Tyr	Pro	Pro	Λsn	Glu	Gly	Phe	Cys	Pro	Cys	Leu	Glu	Ser	Gly	He	Gln
		275					280					285			
Asn	Val	Ser	Thr	Cys	Arg	Phe	Ser	Ala	Pro	Leu	Phe	Leu	Ser	His	Pro
	290					295					300				
llis	Phe	Leu	۸sn	Ala	Asp	Pro	Val	Leu	Ala	Glu	Ala	Val	Thr	Gly	Leu
305					310					315					320
His	Pro	Asn	Gln	Glu	Ala	His	Ser	Leu	Phe	Leu	Asp	He	His	Pro	Val
				325					330					335	
Thr	Gly	He	Pro	Met	Asn	Cys	Ser	Val	Lys	Leu	Gln	Leu	Ser	Leu	Tyr
			340					345					350		
Met	Lys	Ser	Val	Ala	Gly	He	Gly	Gln	Thr	G1 y	Lys	He	Glu	Pro	Va1
		355					360					365			
Val	Leu	Pro	Leu	Leu	Trp	Phe	Ala	Glu	Ser	Gly	Ala	Met	Glu	Gly	Glu
	370					375					380				
Thr	Leu	His	Thr	Phe	Tyr	Thr	Gln	Leu	Val	Leu	Met	Pro	Lys	Val	Met
385					390					395					400
His	Tyr	Ala	Gln	Tyr	Val	Leu	Leu	Ala	Leu	Gly	Cys	Val	Leu	Leu	Leu
				405					410					415	
Val	Pro	Val	He	Cys	Gln	lle	Arg	Ser	Gln	Val	Gly	Ala	Gly	Gln	Arg
			420					425					430		
Ala	Ala	Arg	Ala	Asp	Ser	His	Ser	Leu	Ala	Cys	Trp	Gly	Lys	Gly	Ala
		435					440					445			
Ser	Asp	Arg	Thr	Leu	Trp	Pro	Thr	Ala	Ala	Trp	Ser	Pro	Pro	Pro	Ala
	450					455					460				
Ala	Val	Leu	Arg	Leu	Cys	Arg	Ser	Gly	Ser	Gly	His	Cys	Trp	Gly	Leu
465					470					475					480
Arg	Ser	Thr	Leu	Ala	Ser	Phe	Ala	Cys	Arg	Val	Ala	Thr	Thr	Leu	Pro
				485					490					495	
Val	Leu	Glu	Gly	Leu	Gly	Pro	Ser	Leu	Gly	Gly	Gly	Thr	Gly	Gly	Leu
			500					505					510		

<210> 3628

<211> 444

<212	2> PI	T													
<213	3> Ho	omo s	sapie	ens											
<400)> 36	528													
Met	Glu	Asn	Ser	G1 y	Lys	Ala	Asn	Lys	Lys	Лsp	Thr	His	Asp	Gly	Pro
1				5					10					15	
Pro	Lys	Glu	He	Lys	Leu	Pro	Thr	Ser	Glu	Ala	Leu	Leu	Asp	Tyr	Gli
			20					25					30		
Cys	Gln	Ile	Lys	Glu	Asp	Ala	Val	Glu	Gln	Phe	Met	Phe	Gln	Ile	Ly:
		35					40					45			
Thr	Leu	Arg	Lys	Lys	Asn	Gln	Lys	Tyr	His	Glu	Arg	Asn	Ser	Arg	Let
	50					55					60				
Lys	Glu	Glu	Gln	lle	Trp	His	lle	Arg	His	Leu	Leu	Lys	Glu	Leu	Sei
65					70					75					80
Glu	Glu	Lys	Ala	Glu	Gly	Leu	Pro	Val	Val	Thr	Arg	Glu	Asp	Val	Glu
				85					90					95	
Glu	Ala	Met	Lys	Glu	Lys	Trp	Lys	Phe	Glu	Arg	Asp	Gln	Glu	Lys	Ası
			100					105					110		
Leu	Arg	Asp	Met	Arg	Met	Gln	He	Ser	Asn	Ala	Glu	Lys	Leu	Phe	Lei
		115					120					125			
Glu		Leu	Ser	Glu	Lys		Tyr	Trp	Glu	Glu		Lys	Asn	Val	Gl
	130					135					140				
	Glu	Arg	His	Ala		Leu	He	Thr	Ser		GIn	Asn	Asp	He	
145			6.1		150	6.1			0	155		/r	,	1.1	160
Ihr	Val	Lys	Glu		Ala	Glu	Lys	Met		Glu	HIS	lyr	Lys		l hi
1	C1	۸	ть	165	1	1	11.	11.	170	C1	Tl	1	1	175	1
Leu	Giu	ASP	180	Arg	Lys	Lys	116	11e 185	Lys	GIU	1111	ı.eu	190	GIII	rei
Acn	Glp.	Lvc		Glu	Trn	Alo	The	Gln	Acn	Ala	Va1	Lve		110	Λcı
лър	0.111	195	Lys	Olu	11 b	Mia	200	0111	ASII	MIa	vai	205	Leu	.116	AS
lve	Glv		Tyr	ىرم ا	Glu	lle.		Glu	Aen	Aen	Trn		lve	lve	Gb
Lys	210	501	. y .i	Lou	Olu	215	ттр	51 ti	11311	пор	220	Lou	E) 3	1.30	011
	• •														

Val Ala 11e His Arg Lys Glu Val Glu Glu Leu Lys Asn Ala 11e His

Glu Leu Glu Ala Glu Asn Leu Val Leu 11e Asp Gln Leu Ser Asn Cys

Arg Leu Val Asp Leu Lys lle Pro Arg Tyr Pro Val Leu His Ser Cys Pro Thr Ser Asn Pro Arg His Leu Leu Leu Leu Pro Leu Glu Ser Cys Leu lle Ser Ala Arg Arg Cys Trp Arg Leu Tyr Leu Thr Gln Ala Ala Gly Leu Glu Val Pro Pro Glu Glu Met Ser Leu Glu Leu Pro Glu Thr His Ile Glu Glu Lys Ser Glu Leu Gln Pro Thr Glu Val Glu Ser Arg Asp Leu Met Ser Ser Ser Asp Glu Ser Thr Ile Leu His Leu Ser His Glu Asn Ser Ile Glu Asp Leu Gln Tyr Val Lys Ile Asp Lys Glu Glu Asn Ser Gly Thr Glu Phe Gly Asp Thr Asp Met Lys Tyr Leu Leu Tyr Glu Asp Glu Lys Asp Phe Lys Asp Tyr Val Asn Leu Gly Pro Leu Gly Val Lys Leu Met Ser Val Glu Ser Lys Lys Met Pro 11e His Phe Gln Glu Lys Glu Ile Pro Val Lys Leu Tyr Lys Asp Val Arg Ser Pro Glu Ser His Ile Thr Tyr Lys Met Met Lys Ser Phe Leu

<210> 3629

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3629

Met Leu Ser Asn Leu His Glu Leu Leu Pro Asn His Leu Met Glu Thr

1 5 10 15

Leu Tyr Ser Arg Lys Ser Glu Glu Asp Lys Lys Lys Cys Glu Asn Pro

Glu Leu Ser Gly Leu Glu Arg Ile Leu Ala Arg His Gln Leu Pro Lys Glu lle Asn Leu Thr Pro Lys Pro Asn Arg Met Pro Pro Trp Lys Arg Lys Ile Ile Asn Asn Val Thr Asp Gly Trp Lys Lys Cys His Leu Leu Lys Arg Asn Thr Lys Glu Pro Pro Met Ser Thr lle Val Val Ser Asn Thr Ile Pro Ser Ile Leu Leu Pro Cys Tyr Met Ala Glu Lys Glu His Ala Thr His <210> 3630 <211> 116 <212> PRT <213> Homo sapiens <400> 3630 Met Cys Lys His Gly Pro Phe Thr Phe Leu Tyr Leu Pro Cys Arg Ile Phe Thr Lys lle Leu Gly Gly Gly Ala Val Asn lle Ala His Tyr Ala Arg Gln Glu Val Ile Asn Val Ser Pro Gly Tyr Gln Leu Val Arg Asn Arg Glu Gln Ile Ser Val Thr Leu Gly Asp Glu Met Phe Asp Arg Lys Lys Arg Trp Glu Ser Glu Ile Pro Asp Lys Gly Arg Phe Ser Arg Thr Asn 11e 11e Ser Asp Leu Glu Glu Gln 11e Ser Glu Leu Thr Ala I1e lle Glu Gln Met Asn Arg Asp His Gln Ser Ala Gln Lys Leu Gly Ala Gln Arg Gly Pro

<210> 3631

<211> 356 <212> PRT <213> Homo sapiens <400> 3631 Met Asp Thr Gln Gly Pro Val Ser Gln Pro Phe Gln Gln Pro Glu Lys Pro Gly Arg Val Arg Arg Arg Lys Thr Arg Arg Glu Arg Asn Lys Ala Leu Val Gly Ser Arg Arg Pro Leu Ala His His Asp Pro Pro Val Ala Ile Arg Asp Pro Pro Val Val Pro Thr Ala Ser Lys Leu Val Val Ile Thr Gln Gly Arg Leu Ser Arg Glu His Arg Gly Leu Phe Asn His Glu Val Lys Ser Leu Asp Val Ala Arg Leu Leu Ser Ser Gly Thr Leu Val Pro Gly Ser Pro Thr Leu Pro Ala Lys Pro Ser Pro Ser Pro Gly Arg Ala Gln Glu Pro Ala Pro Arg Ser Arg Asp Lys Glu Asn Gln Val Pro Gly Gly Ser Gly Pro Gly Pro Pro Ser Ser Pro Glu Leu Ser Gly Val Gly Gln Leu Leu Ala Glu Leu Gln Cys Gln Leu Ser Leu Pro Gln Ala Phe Pro Arg Arg Asn Leu Ile Gln Asp Ala Arg Asp Ala Ile Val His Thr Leu Gln Ala Cys His Gly Cys Val Pro Asp Leu Ala Leu Val Leu Arg Gly Cys Gln Pro Pro Leu Pro Gly Ala Lys Pro Gly Val Ser Glu Arg Lys Met Thr Pro Phe Trp lle Asn Ser Pro Asp Gln Val Pro Glu

210 215 220 Gln Glu Arg Gln Arg Lys Gln Gln Gly Thr Lys Glu Phe Thr Phe Pro 230 235 Met Pro Tyr Thr Ser Ser Met Pro Thr Ala His Arg Gly Ser Leu Ala 245 250 Pro Pro Arg Gly Pro Trp Pro Pro Tyr Phe Pro Ser Leu Ser Ser Pro 260 265 Ser Gly Thr Ala Trp Gly Pro Pro Thr Ala Phe Asp Leu Leu Lys Ser 275 280 285 lle Trp Leu Val Ala Thr Pro Pro Pro Pro Arg Pro Trp Gly Val Gly 290 295 300 Leu Pro Gln Pro Leu Pro Gln Pro Ser Ser Pro Leu Leu Pro Arg Thr 310 315 Ser Val Leu Asp Trp Ser Pro Ser Pro Pro Ser Pro Leu Pro Ser Leu 330 325 Ser Trp Val Val Ala Gln Ser Ser Pro Glu Ala Trp Ser Phe Pro Pro 340 345 350 Met Arg Leu Tyr 355 <210> 3632 <211> 571 <212> PRT <213> Homo sapiens <400> 3632 Met Val Gly Glu Gly Pro Tyr Leu Ile Ser Asp Leu Asp Gln Arg Gly

 1
 5
 10
 15

 Arg Arg Arg Ser Phe Ala Glu Arg Tyr Asp Pro Ser Leu Lys Thr Met
 20
 25
 30

 Ile Pro Val Arg Pro Cys Ala Arg Leu Ala Pro Asn Pro Val Asp Asp
 40
 45

 Ala Gly Leu Leu Ser Phe Ala Thr Phe Ser Trp Leu Thr Pro Val Met
 50
 55
 60

 Val Lys Gly Tyr Arg Gln Arg Leu Thr Val Asp Thr Leu Pro Pro Leu

65					70					75					80
Ser	Thr	Tyr	Asp	Ser	Ser	Asp	Thr	Asn	Ala	Lys	Arg	Phe	Arg	Val	Leu
				85					90					95	
Trp	Asp	Glu	Glu	Val	Ala	Arg	Val	Gly	Pro	Glu	Lys	Ala	Ser	Leu	Ser
			100					105					110		
His	Va]	Val	Trp	Lys	Phe	Gln	Arg	Thr	Arg	Val	Leu	Met	Asp	He	Val
		115					120					125			
Ala	Asn	lle	Leu	Cys	lle	Ile	Met	Ala	Ala	lle	Gly	Pro	Thr	Val	Leu
	130					135					140				
lle	His	Gln	lle	Leu	Gln	Gln	Thr	Glu	Arg	Thr	Ser	Gly	Lys	Val	Trp
145					150					155					160
Val	G1y	lle	Gly	Leu	Cys	He	Ala	Leu	Phe	Ala	Thr	Glu	Phe	Thr	Lys
				165					170					175	
Val	Phe	Phe	Trp	Ala	Leu	Ala	Trp	Ala	He	Asn	Tyr	Arg	Thr	Ala	He
			180					185					190		
Arg	Leu	Lys	Va]	Ala	Leu	Ser	Thr	Leu	Val	Phe	Glu	Asn	Leu	Val	Ser
		195					200					205			
Phe	Lys	Thr	Leu	Thr	His	lle	Ser	Val	Gly	Glu	Val	Leu	Asn	lle	Leu
	210					215					220				
Ser	Ser	Asp	Ser	Tyr	Ser	Leu	Phe	Glu	Ala	Ala	Leu	Phe	Cys	Pro	Leu
225					230					235					240
Pro	Ala	Thr	lle	Pro	lle	Leu	Met	Val	Phe	Cys	Val	Ala	Tyr	Ala	Phe
				245					250					255	
Phe	He	Leu	Gly	Pro	Thr	Ala	Leu	He	G] y	lle	Ser	Va]	Tyr	Val	He
			260					265					270		
Phe	He		Val	Gln	Met	Phe		Ala	Lys	Leu	Asn		Ala	Phe	Arg
		275					280					285			
Arg		Ala	lle	Leu	Va]		Asp	Lys	Arg	Val		Thr	Met	Asn	Glu
	290					295					300				
	Leu	Thr	Cys	He		Leu	He	Lys	Met		Ala	Trp	Glu	Lys	
305					310					315	a.				320
Phe	Thr	Asn	Thr		GIn	Asp	He	Arg		Arg	Glu	Arg	Lys		Leu
6.1		4.3	<i>C</i> '	325		63	C	63	330	6			. ,	335	
Glu	Lys	Ala		Phe	Val	GIn	Ser		Asn	Ser	Ala	Leu	Ala	Pro	He
Ve. 1	C	TI ·	340	A 7	רי	Vol	1 .	345	,	C	C.	0.3	350	1	1

Arg Arg Lys Leu Thr Ala Pro Val Ala Phe Ser Val Ile Ala Met Phe Asn Val Met Lys Phe Ser Ile Ala Ile Leu Pro Phe Ser Ile Lys Ala Met Ala Glu Ala Asn Val Ser Leu Arg Arg Met Lys Lys lle Leu lle Asp Lys Ser Pro Pro Ser Tyr lle Thr Gln Pro Glu Asp Pro Asp Thr Val Leu Leu Leu Ala Asn Ala Thr Leu Thr Trp Glu His Glu Ala Ser Arg Lys Ser Thr Pro Lys Lys Leu Gln Asn Gln Lys Arg His Leu Cys Lys Lys Gln Arg Ser Glu Ala Tyr Ser Glu Arg Ser Pro Pro Ala Lys Gly Ala Thr Gly Pro Glu Glu Gln Ser Asp Ser Leu Lys Ser Val Leu His Ser Ile Ser Phe Val Val Arg Lys Gly Lys Ile Leu Gly Ile Cys Gly Asn Val Gly Ser Gly Lys Ser Ser Leu Leu Ala Ala Leu Leu Gly Gln Met Gln Leu Gln Lys Gly Val Val Ala Val Asn Gly Thr Leu Ala Tyr Val Ser Gln Gln Ala Trp lle Phe His Gly Asn Val Arg Glu Asn lle Leu Phe Gly Glu Lys Tyr Asp His Gln Arg

<210> 3633

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3633

Met Pro Gln Pro Ser Val Ser Gly Met Asp Pro Pro Phe Gly Asp Ala

1				5					10					15	
Phe	Arg	Ser	His	Thr	Phe	Ser	Glu	Gln	Thr	Leu	Met	Ser	Thr	Asp	Leu
			20					25					30		
Leu	Ala	Asn	Ser	Ser	Asp	Pro	Asp	Phe	Met	Tyr	Glu	Leu	Asp	Arg	Glu
		35					40					45			
Met	Asn	Tyr	Gln	Gln	Asn	Pro	Arg	Лsp	Asn	Phe	Leu	Ser	Leu	Glu	Asp
	50					55					60				
Cys	Lys	Asp	Ile	Glu	Asn	Leu	G1u	Ser	Phe	Thr	Asp	Val	Leu	Asp	Asn
65					70					75					80
Glu	Gly	Ala	Leu	Thr	Ser	Asn	Trp	Glu	Gln	Trp	Asp	Thr	Tyr	Cys	Glu
				85					90					95	
Asp	Leu	Thr	Lys	Tyr	Thr	Lys	Leu	Thr	Ser	Cys	Asp	Пe	Тгр	Gly	Thr
			100					105					110		
Lys	G] u		Asp	Tyr	Leu	Gly		Asp	Asp	Phe	Ser	Ser	Pro	Tyr	Gln
		115			_		120	_				125			
Asp		Glu	Val	He	Ser		Thr	Pro	Thr	Leu		Gln	Leu	Asn	Ser
0.1	130	_	0.1	~		135		_			140				
	Asp	Ser	GIn	Ser		Ser	Asp	Ser	Leu		Tyr	Pro	Asp	Ser	
145	C	17 1		C1	150	n	,	D	C	155	101	D	C 1		160
rne	Ser	vaj	Lys		Asn	Pro	Leu	Pro		Ser	rne	Pro	бту		Lys
11.	т	C	Δ	165	A.1	A 1 -	D	17 - 1	170	C	C	1	Т1	175	C1
116	ınr	Ser		Ala	Ala	Ala	Pro		Cys	ser	ser	Lys		Leu	GIN
Ala	Clu	Vol	180 Pro	Lou	Sor	Acn	Cvc	185 Vo.1	Cln	Lvc	41a	Sor	190	Dro	Tha
пта	Gru	195	110	Leu	361	изр	200	va1	0111	rys	Ма	Ser 205	Lys	110	1111
Ser	Ser		Gln	lle	Met	Val		Thr	Asn	Met	Tyr	His	Asn	Glu	lvs
50,1	210	1113	OIII	.110	mc. c	215	Lys	111,1	11311	,nc c	220	111.5	Non	010	Lys
Val		Phe	His	Val	Glu		Lvs	Asn	Tyr	Val		Lys	Ala	Lvs	Val
225					230	0,0	23,0	ПОР	•3*	235	2,0	., 0		2,0	240
	Пе	Asn	Pro	Val		Gln	Ser	Arg	Pro		Leu	Ser	Gln	lle	
•				245				Ü	250					255	
Thr	Asp	Ala	Ala		Glu	Asn	Thr	Cys		Cys	Gly	Ala	Val		Lys
	-		260					265	-				270		
Arg	Gln	Glu	Lys	Lys	Gly	Met	Glu	Pro	Leu	Gln	Gly	llis	Ala	Thr	Pro
		275					280					285			

Ala Leu Pro Phe Lys Glu Thr Gln Glu Leu Leu Ser Pro Leu Pro 300 295 Gln Glu Gly Pro Gly Ser Leu Ala Ala Gly Glu Ser Ser Ser Leu Ser 310 315 320 Ala Ser Thr Ser Val Ser Asp Ser Ser Gln Lys Lys Glu Glu His Asn 330 325 335 Tyr Ser Leu Phe Val Ser Asp Asn Leu Gly Glu Gln Pro Thr Lys Cys 345 340 Ser Pro Glu Glu Asp Glu Glu Asp Glu Glu Asp Val Asp Asp Glu Asp 365 355 360 His Asp Glu Gly Phe Gly Ser Glu His Glu Leu Ser Glu Asn Glu Glu 380 370 375 Glu Glu Glu Glu Glu Asp Tyr Glu Asp Asp Lys Asp Asp Asp Ile 395 400 Ser Asp Thr Phe Ser Glu Pro Gly 11e 11e Met Leu Ala Ser Leu Pro 405 410 415 Λsp

<210> 3634

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3634

 Met Trp Arg Gln Glu Glu Glu Glu Leu Arg Asp Gln Glu Lys Leu Arg Lys

 1
 5
 10
 15

 His Glu Glu Lys Thr Trp Arg Gln Glu Gln Arg Leu Arg Asp Gln Glu
 20
 25
 30

 Lys Glu Leu Arg Lys Gln Glu Lys Gln Met Leu Lys Gln Lys Gln Gln
 35
 40
 45

Met Ala Glu Gln Glu Glu Gln Met Gln Lys Gln Glu Glu Gln Val Arg
50 55 60
Lys Gln Glu Glu Gln Val Arg Lys Gln Glu Glu Gln Met Trp Lys Gln

Glu Glu Gln Met Arg Lys Gln Glu Glu Gln Met Arg Lys Gln Glu Lys Gln Met Gly Glu Gln Glu Gln Met Arg Lys Arg Glu Glu Gln Met Arg Lys Arg Glu Glu Gln lle Thr Gln Leu Pro Pro Gly Met Lys Asn Thr Gln Glu His Pro Gly Leu Gly Ser Thr Ser Cys Ile Leu Phe Phe Tyr Arg Gly Asp Lys Lys Lys Ile Lys Ile Ile Asn Ile

<210> 3635

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3635

Met Thr Pro Pro Met Arg Thr Gln Gly Thr Glu Thr Lys Ser Lys Lys Ala Leu Arg Val Glu Gly Ser Ser Gly Ala Lys Gly Arg Val Arg Ala Thr Pro Ala Arg Arg His Phe Gln Thr Asp Leu Pro Ala Pro Arg Asn Arg Ser Arg Pro Pro Ser Ser Cys Ile Leu Asp Pro Thr Gln Thr Arg Ser Arg Thr His Leu Pro Arg Ala Pro Gln Thr Leu Thr Ala Ser Gly Ala Ala Asp Thr Asp Gln Val Pro His Ser Leu Gly Leu Gln Gly Arg Ser Arg Arg Pro Leu Thr Leu Arg Glu Ala Leu Thr Asp Gly Ala Leu

Pro Arg Leu Ala Ser Thr Pro Arg Gln Arg Leu Pro 11e Ala Val Arg 115 120 125

Leu Pro Gly Ile Gly Pro Ala Ala Thr Pro Ala Cys Arg Pro Arg Gly

<210> 3636

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3636

Met 11e His Leu Lys Gly Ser Ser Ser Gly Glu Ser Gln Tyr Leu Pro
1 5 10 15

Gln His Cys Arg Met Gly Arg Ser Leu Pro Pro Thr His Ser Thr His 20 25 30

Leu Thr Pro Pro Phe Gln Gly Lys Asp Leu Arg Ala Ala Gly Glu Ser
35 40 45

Glu lle Gly Arg His Gly Ala Asn Trp Ala Thr Ala Arg Asp Leu Glu 50 55 60

Pro Thr Pro Leu Asn Ser Glu His Arg Lys Arg Arg Gln Ala Arg Arg 65 70 75 80

Gly Gl
n Glu Ala Asp Thr Arg Ala Gly Gl
n Arg Asn Gly Gly Glu His 85 90 95

Thr His Ala Leu Arg Ser Lys Ala Glu Arg Cys Glu Phe Thr Lys Thr 100 105 110

Gly Val His Arg Pro lle Thr Asp Thr Asp Pro Gly Trp Pro Gly Ala

115 120 125

Pro His Thr Gly

130

<210> 3637

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3637

Met Glu Cys Asn Gly Leu 11e Leu Ala His Cys Asn Leu Cys Leu Pro

1 5 10 15

Gly Ser Gly Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Thr Thr 20 25 30

Gly Thr His His Cys Thr Gln Leu Ile Phe Val Phe Leu Val Glu Thr 35 40 45

Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser 50 55 60

Asp Leu Pro Ala Ser Ala Ser Gln Asn Ala Gly Ile Thr Gly Val Ser
65 70 75 80

His Trp Ala Trp Thr Leu Phe Phe Tyr Phe Leu Asn Lys Leu Thr Phe
85 90 95

Ala Leu Gln Thr Ilis Pro Glu Phe Phe Phe Phe Phe Phe Glu Thr
100 105 110

Gly Ser His Cys Val Ala Gln Val Glu Trp His Tyr Leu Gly Ser Leu 115 120 125

Gln Pro Pro Pro Pro Arg Phe Lys 130 135

<210> 3638

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3638

Met Met Gly Ile Phe Asn Gly Lys Ala Val Thr Gln Pro Lys Arg Gly

1 5 10 15

Thr He Ser Glu Ala Ser Arg Gln Lys Ser Leu Asp Arg Arg Ser Asn 20 25 30

Glu Pro Gly Arg Glu His Arg Ala Gly Ala His Val Glu Asn Leu Leu 35 40 45

Arg Asn Leu Leu Glu Ala Glu Lys Thr Leu Gly Lys Ser Ser Ser His

55 50 Gly Ser Gly Ile Pro Trp Ile Val Arg Pro Ala Phe Val Phe Ser Leu 75 70 Ser Leu Phe Leu Ala Val Pro Pro Gly Ser His Ser Cys Ser Arg Asn 85 90 Gln Ala Arg Ser Gly Cys Ile Phe Trp Arg Leu Asn Asn Lys Lys Gln 100 105 110 Thr Asn <210> 3639 <211> 164 <212> PRT <213> Homo sapiens <400> 3639 Met Phe Ile Trp Asn Leu Ile Ser Thr Trp Gly Leu Val Ile Thr Trp 10 Val Leu Gly Ile His Leu Gly Leu Glu Tyr Pro Pro Gly Ala Leu Ser 20 25 30 Phe Thr Arg Asp Ser Cys Leu Pro Trp Thr Trp Val Tyr Ile Cys Cys 40 Leu Met Tyr Thr Leu Arg Val Met Ser Thr Trp Gly Gln Met Ser Ser 50 55 Trp Gly Leu Ser Val His Leu Val Ser Asp Val Cys Leu Gly Thr Cys 70 75 Val His Leu Arg Pro Asp lle His Leu Gly Thr Gly Arg Pro Arg Gly 85 90 Ala Asp Val Gln Leu Asp Thr Gly Tyr Pro Pro Gly Ala Trp Gly Ser 105 100 110 Ile Gln Lys Leu Met Ser Asn Trp Gly Leu Met Ser Thr Cys Gly Leu 120 Gly lle His Val Arg Leu Asp Val His Pro Arg Pro Asp Val His Leu 140 130 135

Met Leu Asp Val His Leu Thr Pro Gly Cys Leu Leu Glu Thr Ser Cys

Pro Thr Arg Ile <210> 3640 <211> 459 <212> PRT <213> Homo sapiens <400> 3640 Met Ala Gly Thr Arg Trp Val Leu Gly Ala Leu Leu Arg Gly Cys Gly Cys Asn Cys Ser Ser Cys Arg Arg Thr Gly Ala Ala Cys Leu Pro Phe Tyr Ser Ala Ala Ala Ala Ser Gln Thr Arg Gly Leu Gln Thr Gly Pro Val Pro Pro Gly Arg Leu Ala Gly Pro Pro Ala Val Ala Thr Ser Ala Ala Ala Ala Ala Ala Ser Tyr Pro Ala Leu Arg Ala Ser Leu Leu Pro Gln Ser Leu Ala Ala Ala Ala Ala Val Pro Thr Arg Ser Tyr Ser Gln Glu Ser Lys Thr Thr Tyr Leu Glu Asp Leu Pro Pro Pro Pro Glu Tyr Glu Leu Ala Pro Ser Lys Leu Glu Glu Glu Val Asp Asp Val Phe Leu 11e Arg Ala Gln Gly Leu Pro Trp Ser Cys Thr Met Glu Asp Val Leu Asn Phe Phe Ser Asp Cys Arg lle Arg Asn Gly Glu Asn Gly lle His Phe Leu Leu Asn Arg Asp Gly Lys Arg Arg Gly Asp Ala Leu lle Glu Met Glu Ser Glu Gln Asp Val Gln Lys Ala Leu Glu Lys His

Arg Met Tyr Met Gly Gln Arg Tyr Val Glu Val Tyr Glu 11e Asn Asn

		195					200					205			
Glu	Asp	Val	Asp	Ala	Leu	Met	Lys	Ser	Leu	Gln	Val	Lys	Ser	Ser	Pro
	210					215					220				
Val	Val	Asn	Asp	Gly	Val	Val	Arg	Leu	Arg	Gly	Leu	Pro	Tyr	Ser	Cys
225					230					235					240
Asn	Glu	Lys	Asp	He	Val	Asp	Phe	Phe	Λla	Gly	Leu	Asn	11e	Val	Asp
				245					250					255	
Пе	Thr	Phe	Val	Met	Asp	Tyr	Arg	Gly	Arg	۸rg	Lys	Thr	G1 y	Glu	Ala
			260					265					270		
Tyr	Val	Gln	Phe	Glu	Glu	Pro	Glu	Met	Ala	Asn	Gln	Ala	Leu	Leu	Lys
		275					280					285			
His	Arg	Glu	Glu	Ile	Gly	Asn	Arg	Tyr	lle	Glu	lle	Phe	Pro	Ser	Arg
	290					295					300				
Arg	Asn	Glu	Va]	Arg	Thr	His	Val	Gly	Ser	Tyr	Lys	Gly	Lys	Lys	He
305					310					315					320
Ala	Ser	Phe	Pro	Thr	Ala	Lys	Tyr	He	Thr	Glu	Pro	Glu	Met	Val	Phe
				325					330		•			335	
G1u	Glu	His	Glu	Val	Asn	Glu	Asp	He	Gln	Pro	Met	Thr	Ala	Phe	Glu
			340					345					350		
Ser	Glu	Lys	Glu	Ile	Glu	Leu	Pro	Lys	Glu	Val	Pro	Glu	Lys	Leu	Pro
		355					360					365			
Glu	Ala	Ala	Asp	Phe	Gly	Thr	Thr	Ser	Ser	Leu	His	Phe	Val	His	Met
	370					375					380				
Arg	Gly	Leu	Pro	Phe	Gln	Ala	Asn	Ala	Gln	Asp	He	He	Asn	Phe	Phe
385					390					395					400
Ala	Pro	Leu	Lys	Pro	Val	Arg	He	Thr	Met	Glu	Tyr	Ser	Ser	Ser	Gly
				405					410					415	
Lys	Ala	Thr	Gly	Glu	Ala	Asp	Val	His	Phe	Glu	Thr	His	Glu	Asp	Ala
			420					425					430		
Val	Ala	Ala	Met	Leu	Lys	Asp	Arg	Ser	His	Va1	His	His	Arg	Tyr	He
		435					440					445			
Glu	Leu	Phe	Leu	Asn	Ser	Cys	Pro	Lys	Gly	Lys					
	450					455									

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<212> PRT
<213> Homo sapiens
<400> 3641
Met Pro Val Tyr Cys Lys Tyr Gln Phe His Lys Thr Pro Val His Lys
                                     10
Thr Lys Gly Glu Pro His Gly Thr His Val Tyr Phe Gln Asp Ile Asn
                                 25
Val Ile Phe Leu Gly Ala Leu His Pro Ser Asp Leu Arg Glu Tyr Leu
         35
                             40
                                                  45
Glu Gly Pro Pro Met Val Val Glu Val His Asp Arg Asp Arg Lys Ser
                         55
                                             60
Glu Glu Cys Ser Gln Lys Pro Val Leu Phe Gly Glu Asp Pro Leu Asp
                     70
                                          75
65
                                                              80
Ser Tyr Leu Asn Phe Gln Ala Leu lle Ser Pro Arg Glu Thr Glu Asn
                                      90
Asn Pro Phe Glu Ser Gln Asn Lys Met Trp Tyr Pro Tyr Gly Ile Ala
            100
                                105
Gln Val Ser Phe Ala Asp Leu Leu Leu Gly His Lys Tyr Leu Asn Leu
                            120
                                                 125
        115
Ala Val Pro lle His Ser Cys Glu Val Gln Pro Thr His Cys Gly Gln
                        135
                                             140
Asp Ser Arg Arg Arg Lys Val Val Gly Leu Gly Val Pro Arg Asp Gly
                    150
                                         155
                                                             160
145
His Gln His Gly Pro Met Pro Arg Gly Asn Tyr Leu Glu Ala Asp Ser
                                    170
                165
Gln Leu Lys Leu Arg Val Asp Ile Ala Val Pro Leu Arg Ala Gly Ala
                                185
                                                     190
Arg Ala Ala Asp Pro Asp Leu Gly Gly Ser Gln Phe Gly Arg lle lle
        195
                            200
                                                 205
Phe Val Phe Asp Phe Lys Lys Val Ser Leu Leu His Ser Leu Leu Gln
                        215
Asp Ile Thr Met lle Asn Ala Lys Ala Leu Gly Leu Asp Ser Tyr Pro
225
                    230
                                         235
                                                             240
```

Val Arg Thr Leu Gln Gln 11e Leu Ser Ala Phe Lys Val Arg Val Arg

				245					250					255	
Val	Gln	Glu	Gln	G1n	His	Leu	Asp	Val	Leu	Thr	Gly	Phe	His	Leu	Leu
			260					265					270		
Asp	Gly	Lys	Thr	His	Leu	Phe	He	Leu	Glu	Gly	Leu	Ala	Asp	Gln	Gly
		275					280					285			
Leu	Arg	Gln	Leu	Trp	Glu	Asn	His	G1n	Ser	Trp	Ile	Pro	Arg	Ser	Glu
	290					295					300				
His	Arg	Lys	Tyr	Lys	Val	Leu	Tyr	Asn	Ser	Gln	Leu	Leu	Phe	Arg	Ser
305					310					315					320
Arg	Leu	Tyr	Gly	Asp	Leu	Glu	Ala	He	Leu	Tyr	His	Val	His	Leu	Phe
				325					330					335	
Gln	Pro	Thr	Glu	Leu	Leu	Leu	Gln	Gln	Ala	Val	Phe	Phe	Leu	Arg	Asp
			340					345					350		
Thr	Glu	Arg	Arg	Arg	Val	Phe	Gln	Ala	Leu	Ala	Arg	He	His	Asp	Пе
		355					360					365			
Cys	Tyr	Asn	Ser	Thr	Thr	Leu	Trp	Asp	Val	Thr	Val	Arg	Asp	Leu	Leu
	370					375					380				
Pro	Ser	Ser	Ala	Met	He	Lys	Asp	Leu	Ser	Gln	Glu	Phe	Gly	Met	Pro
385					390					395					400
Leu	Ser	Gln	Glu	Glu	Leu	Thr	Asp	Glu	Lys	Leu	Phe	Ala	Leu	Pro	Pro
				405					410					415	
Gln	Pro	Ala	Pro	Asn	Leu	Glu	Asp	Tyr	His	Ser	Arg	Asn	Ser	Thr	Leu
			420					425					430		
Thr	Leu	Glu	He	His	Ala	llis	Gln	Glu	Pro	Arg	Lys	Arg	Phe	Thr	Tyr
		435					440					445			
Ser	Gln	Asp	Tyr	Leu	Ser	Ala	Met	Val	Glu	Pro	Leu	Asp	Leu	Lys	Glu
	450					455					460				
Glu	Glu	Lys	Lys	Ala	Gln	Lys	Lys	Ser	Arg	G]n	Ala	Trp	Leu	Thr	Ala
465					470					475					480
Arg	Gly	Phe	Gln	Val	Thr	G1 y	Leu	Gln	Ser	Asp	Thr	Glu	Ser		Phe
				485					490					495	
Gln	Asp	Leu		Leu	Pro	Pro	He		Glu	Leu	Asn	Glu		Trp	Lys
			500					505					510		
Glu	Asn		Leu	Phe	Ala	Asn		Leu	Glu	Pro	Val		Asp	Arg	Asp
		515					520					525			
Arg	Trp	Ser	Trp	Asp	Arg	His	His	Val	Asp	Phe	Asp	Leu	Tyr	Lys	Lys

Pro Pro Pro Phe Leu Glu Leu Leu Pro Ser Pro Ala Pro Lys Pro Val Thr Val Arg Lys Lys Gly Asn Ser Pro Ile Ser <210> 3642 <211> 673 <212> PRT <213> Homo sapiens <400> 3642 Met Asp His Ser Cys Thr Arg Phe Ile His Arg Arg Gly Pro Pro Thr Arg Thr Arg Ala Gly Phe Lys Arg Gly Lys Arg Pro Arg Ile Gln Gln Arg Pro Arg Ala Arg Val Ser Gly Thr Ile Pro Ala Ser Arg Leu His Pro Ala Pro Ala Ser Gln Pro Gly Pro Cys Pro Ala Pro Gly His Cys

Pro Val Gly Pro Ala His Glu Arg Pro Met Gly Ser Ser Gln Glu Glu Gly Leu Arg Cys Gln Pro Ser Gln Pro Asp His Asp Ala Asp Gly His Cys Gly Pro Asp Leu Glu Gly Ala Glu Arg Ala Ser Ala Thr Pro Gly Pro Pro Gly Leu Leu Asn Ser His Arg Pro Ala Asp Ser Asp Asp Thr Asn Ala Ala Gly Pro Ser Ala Ala Leu Leu Glu Gly Leu Leu Leu Gly Gly Gly Lys Pro Ser Pro His Ser Thr Arg Pro Gly Pro Phe Phe Tyr lle Gly Gly Ser Asn Gly Ala Thr lle lle Ser Ser Tyr Cys Lys Ser Lys Gly Trp Gln Arg Ile His Asp Ser Arg Arg Asp Asp Tyr Thr Leu

			180					185					190		
Lys	Trp	Cys	Glu	Val	Lys	Ser	Arg	Asp	Ser	Tyr	Gly	Ser	Phe	Arg	Glu
		195					200					205			
G1y	Glu	Gln	Leu	Leu	Asp	Gln	Leu	Pro	Asn	Asn	Lys	Leu	Leu	Thr	Thr
	210					215					220				
Lys	He	Gly	Leu	Leu	Ser	Thr	Leu	Arg	Gly	Arg	Ala	Arg	Ala	Met	Ser
225					230					235					240
Lys	Ala	Ser	Lys	Val	Pro	Gly	Gly	Val	Gln	Ala	Arg	Leu	Glu	Lys	Asp
				245					250					255	
Ala	Ala	Ala	Pro	Ala	Leu	Glu	Asp	Leu	Pro	Trp	Thr	Ser	Pro	Gly	Tyr
			260					265					270		
Leu	Arg	Pro	Gln	Arg	Val	Leu	Arg	Met	Glu	Glu	Phe	Phe	Pro	Glu	Thr
		275					280					285			
Tyr	Arg	Leu	Asp	Leu	Lys	His	Glu	Arg	Glu	Ala	Phe	Phe	Thr	Leu	Phe
	290					295					300				
Asp	Glu	Thr	Gln	He	Trp	He	Cys	Lys	Pro	Thr	Ala	Ser	Asn	Gln	Gly
305					310					315					320
Lys	Gly	Ile	Phe	Leu	Leu	Arg	Asn	Gln	Glu	Glu	Val	Ala	Ala	Leu	Gln
				325					330					335	
Ala	Lys	Thr	Arg	Ser	Met	Glu	Asp	Asp	Pro	He	His	His	Lys	Thr	Pro
			340					345					350		
Phe	Arg	Gly	Pro	Gln	Ala	Arg	Val	Val	Gln	Arg	Tyr	lle	Gln	Asn	Pro
		355					360					365			
Leu		Val	Asp	Gly	Arg		Phe	Asp	Val	Arg		Tyr	Leu	Leu	He
	370					375					380				
	Cys	Thr	Thr	Pro	Tyr	Met	lle	Phe	Phe			G]y	Tyr	Ala	
385					390					395					400
Leu	Thr	Leu	Ser		Tyr	Asp	Pro	His		Ser	Asp	Leu	Gly		His
	mı			405					410	n.				415	
Leu	Thr	Asn		Phe	Met	GIn	Lys		Ser	Pro	Leu	Tyr		Leu	Leu
	6.1		420	v. 1	T.	C		425		,	4		430 T	T.	C
Lys	Glu		Inr	Val	Trp	Ser		Glu	111 S	Leu	Asn		ıyr	116	Ser
A	701 -	435	т	1	A 3	Α	440	1	А1	1	Λ	445	V 1	DI	T1
дsр		rne	irp	LYS	Ala		Uly	Leu	мта	Lys		ırp	val	rne	เกม
The	450	Lve	Lve	Δνα	Met	455	G1s	116	Mot	Δla	460 His	Cvc	Pho	Lou	Δ1 a

465					470					475					480
Ala	Lys	Pro	Lys	Leu	Asp	Cys	Lys	Leu	Gly	Tyr	Phe	Лѕр	Leu	He	Gly
				485					490					495	
Cys	Asp	Phe	Leu	lle	Asp	Asp	Asn	Phe	Lys	Val	Trp	Leu	Leu	Glu	Met
			500					505					510		
Asn	Ser	Asn	Pro	Ala	Leu	His	Thr	Asn	Cys	Glu	Val	Leu	Lys	Glu	Val
		515					520					525			
He	Pro	G1 y	Val	Val	Пe	G1u	Thr	Leu	Asp	Leu	Val	Leu	Glu	Thr	Phe
	530					535					540				
Arg	Lys	Ser	Leu	Arg	Gly	Gln	Lys	Met	Leu	Pro	Leu	Leu	Ser	Gln	Arg
545					550					555					560
Arg	Phe	Val	Leu	Leu	His	Asn	Gly	Glu	Ala	Asp	Pro	Arg	Pro	His	Leu
				565					570					575	
Gly	Gly	Ser	Cys	Ser	Leu	Arg	Arg	Trp	Pro	Pro	Leu	Pro	Thr	Arg	Gln
			580					585					590		
Ala	Lys	Ser	Ser	Gly	Pro	Pro	Met	Pro	His	Ala	Pro	Asp	Gln	Pro	Gly
		595					600					605			
Ala	Arg	Arg	Pro	Ala	Pro	Pro	Pro	Leu	Val	Pro	Gln	Arg	Pro	Arg	Pro
	610					615					620				
Pro	Gly	Pro	Asp	Leu	Λsp	Ser	Ala	His	Asp	Gly	Glu	Pro	Gln	Ala	Pro
625					630					635					640
Gly	Thr	G]u	G]n	Ser	Gly	Thr	Gly	Asn	Arg	His	Pro	Ala	Gln	G] u	Pro
				645					650					655	
Ser	Pro	Gly	Thr	Ala	Lys	Glu	Glu	Arg	Glu	Glu	Pro	Glu	Asn	Ala	Arg
			660					665					670		
Pro															

<210> 3643

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3643

Met Pro Ser Phe Ala Leu Val Pro Trp Ala Ala Val Gln Trp His His

5 10 15 Leu Gly Ser Pro Gln Pro Pro Pro Pro Lys Phe Lys Arg Phe Ser Cys 25 Leu Ser Leu Pro Ser Ile Trp Asp Tyr Arg Tyr Ala Pro Pro Arg Pro Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Gly Gln 55 Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Ser Pro Ala Ser Ala Ser 70 75 Gln Ser Thr Gly Ile Thr Gly Val Ser His Cys Ala Trp Pro Thr Asn 90 85 Thr Arg Phe Tyr Ser Gly Pro Phe Thr Val Asn Val Gly Gly Pro Trp 100 105 Arg Met Ala Thr Pro Gly Leu Phe Ala Glu Ala Trp Thr Ala Gln Gln 115 120 125 Ala Glu Leu Lys Gln Leu Arg Gln Tyr Gln Leu Lys Gly His Pro Ala 135 140 Val Arg Val Pro Arg Leu Gln Glu 150

<210> 3644

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3644

Met Ser Arg Ala Leu Arg Pro Leu Ser Cys Leu Arg Pro Leu Ser Ser

1 5 10 15

Pro Arg Ala Gly Thr Thr Gly Val Arg Val Thr Arg Thr Ser Trp Gly
20 25 30

Ser Ala Trp Pro Ser Phe Gly Met Ser Pro Gly Gly Pro Arg Met Gly
35 40 45

Gly Gly Trp Asp Leu Pro Asp Val His Glu Val Leu Ile His Ala Pro 50 . 55 60

Arg Val Leu Gly Ser Asp Arg Asp Gly Asn Pro Val Leu Leu Gln Glu

70 75 65 Arg Asp Ser Thr Gly Gly Gly Lys Ala Ala Gly Arg Thr Arg Glu Val 90 Arg Pro Arg Gly Pro Ala Phe Ser Glu Ser Pro Lys Leu Trp Pro Pro 110 Phe Arg Gln Asp Pro Gly Tyr Leu Leu Val Leu Val Thr Val Thr Ser 120 Leu Gly Gly Pro Tyr Cys Trp Thr Cys Pro Arg Glu Thr Ala Gly Pro 130 135 140 Cys Val Cys Asn Ala Asp Leu Gly Gly Ser Phe Gln Lys Thr Leu Ser 150 155 145 160 Leu His Leu Lys Asp Pro 165

<210> 3645

<211> 293

<212> PRT

<213> Homo sapiens

<400> 3645

Met Asn Val Met Asn Val Gly Arg Pro Leu Gly Leu Val His Ser Leu 1 5 10 15

Phe Ser 11e Arg Glu Phe 11e Leu Lys Lys Asp Thr Met Asn Ala Met 20 25 30

Ser Val Ala Lys Pro Ser Ser Ile Ala Gln Ala Leu Leu Asp Thr Arg 35 40 45

Lys Phe IIe Leu Glu Lys Asn His IIe Cys Val Met Asn Val Gly Arg 50 55 60

Ala Ser Gly Arg Val Leu Ser Leu Ser Gly 11e Arg Glu Phe 11e Gln
65 70 75 80

Gly Thr Asn Pro Met Asn Val Met Asn Val Gly Lys Leu Leu Ala Arg
85 90 95

Thr Gln Arg Leu Leu Asp IIe Leu Glu Phe IIe Leu Val Arg Ser Pro 100 105 110

Met Tyr Val Arg Asn Val Gly Arg Pro Ser Gly Gly Thr Gln Asn Phe

Leu Asp Met Arg Glu Phe Thr Leu Glu Arg Asn Pro Met Asn Ala Leu Ser Val Glu Arg Leu Ser Gly Gly Pro Leu Thr Leu Leu Ser Thr Arg Glu Phe lle Leu Glu Arg Asn Pro lle Asn Val Met Ser Val Gln Glu Pro Phe Gly lle Ile Leu Ser Cys Phe Ser Thr Arg Lys Phe lle Leu Glu Arg Asn Leu Met Asn Val Ala Ser Val Arg Lys His Leu Ala Ser Ile Pro Asn Leu Ser Tyr Ile Arg Glu Phe Thr Leu Glu Arg Ser Leu Met Ser Ala Lys Asn Val Arg Arg Leu Leu Val Gly Ala Leu Thr Ser Ser Asp lle Lys Val Phe Thr Val Trp Ser Asn Leu Gln Asn Arg Lys Ala Phe Ser Gly Lys Ala Lys Val Gln Leu lle His Leu Phe Ile Ile Cys Lys Tyr Ala Pro Gln Val Phe Lys Ser Asn Glu Trp Thr Glu Pro Pro Leu Ser Ser His <210> 3646 <211> 139 <212> PRT <213> Homo sapiens <400> 3646 Met Asn Arg Glu His Ser Ala Ser 11e Pro Val Pro Leu Val Ala Leu

Gln Ser Ala Gly Thr Arg Arg Asn Gln Lys Pro Pro Gly Arg Ala Phe

Cys Leu Tyr Gly Val Lys Ala Val Ser Ser Asn Leu Cys Phe Leu Lys 40 Gln Arg Asn Asn Leu Asp Glu Thr Asn Phe Pro Gln Arg Lys Gly Arg 50 55 60 Ala His Ser Glu Leu Val Lys Lys Met Pro Gly Ala Gly Ser 11e Leu 65 70 75 Lys Trp Lys Arg Trp Cys Leu Ala Met Leu Pro Lys Leu Val Leu Asn 85 90 Ser Trp His Gln Val 11e Leu Leu Pro Gln Pro Pro Lys Val Leu Gly 100 105 110 Leu Gln Asn Lys Thr Ile Ser Arg Arg Val Cys Gly Ile Leu Arg Thr 120 125 Asp Thr Gly Arg Asn Lys Gly Tyr Arg Ser Glu 135

<210> 3647

<211> 588

<212> PRT

<213> Homo sapiens

<400> 3647

Met Ala Asn Leu Cys Thr Pro Ser Ser Thr Ala Asn Ser Cys Ser Ser

1 5 10 15

Ser Ala Ser Asn Thr Pro Gly Ala Pro Glu Thr His Pro Ser Ser Ser 20 25 30

Pro Thr Pro Thr Ser Ser Asn Thr Gln Glu Glu Ala Gln Pro Ser Ser

Val Ser Asp Leu Ser Pro Met Ser Met Pro Phe Ala Ser Asn Ser Glu 50 55 60

Pro Ala Pro Leu Thr Leu Thr Ser Pro Arg Met Val Ala Ala Asp Asn
65 70 75 80

Gln Asp Thr Ser Asn Leu Pro Gln Leu Ala Val Pro Ala Pro Arg Val 85 90 95

Ser His Arg Met Gln Pro Arg Gly Ser Phe Tyr Ser Met Val Pro Asn 100 105 110

Ala	Thr	Ile	His	Gln	Asp	Pro	Gln	Ser	11e	Phe	Val	Th.r	Asn	Pro	Val
		115					120					125			
Thr	Leu	Thr	Pro	Pro	Gln	Gly	Pro	Pro	Ala	Ala	Val	Gln	Leu	Se.r	Ser
	130					135					140				
Ala	Val	Asn	He	Met	Asn	Gly	Ser	G1n	Met	llis	He	Asn	Pro	Λla	Asn
145					150					155					160
Lys	Ser	Leu	Pro	Pro	Thr	Phe	Gly	Pro	Ala	Thr	Leu	Phe	Asn	His	Phe
				165					170					175	
Ser	Ser	Leu		Asp	Ser	Ser	Gln		Pro	Ala	Asn	Gln		Trp	Gly
			180					185				_	190		
Asp	Gly		Leu	Ser	Ser	Arg		Ala	Thr	Asp	Ala		Phe	Thr	Val
		195					200			<i>a</i> . •		205	0.1		
GIn		Ala	Phe	Leu	GTy		Ser	Val	Leu	Gly		Leu	Glu	Asn	Met
	210					215	<i>D</i>	C1	DI		220 D	10	6	6.1	
	Pro	Asp	Asn	Ser		Ala	Pro	Gly	Phe		Pro	Pro	Ser	GIn	
225	C	Tl	C	D	230	C1	1	D	C	235	A	D	C	C1	240
vai	ser	Inr	ser	Pro 245	vai	GIY	Leu	Pro	250	116	ASP	Pro	ser	255	Ser
Sor	Dro	Sor	Sor	Ser	Sor	A10	Dvo	Lou		Son	Pho	Sor	C1v		Pro
261	110	261	260	261	261	Ма	110	265	Міа	261	rne	361	270	116	110
G1v	Thr	Ara		Phe	l eu	Gln	Glv		Ala	Pro	Val	Glv		Pro	Ser
01,		275		1 110	1300	0111	280	,,,	.,,,,,	1.0		285		1.0	561
Phe	Asn		Gln	His	Phe	Ser		His	Pro	Tro	Thr		Ala	Ser	Asn
	290	6				295					300				
Ser		Asp	Ser	Pro	He		Ser	Val	Ser	Ser	G1 y	Ser	Ser	Ser	Pro
305					310					315					320
Leu	Ser	Ala	Thr	Ser	Ala	Pro	Pro	Thr	Leu	Gly	Gln	Pro	Lys	G1 y	Va]
				325					330					335	
Ser	Ala	Ser	Gln	Asp	Arg	Lys	He	Pro	Pro	Pro	11e	G] y	Thr	Glu	Arg
			340					345					350		
Leu	Ala	Arg	He	Arg	Gln	Gly	Gly	Ser	Val	Ala	Gln	Ala	Pro	Ala	Gly
		355					360					365	•		
Thr	Ser	Phe	Val	Ala	Pro	Val	Gl y	His	Ser	Gly	11e	Trp	Ser	Phe	Gly
	370					375					380				
Val	Asn	Ala	Val	Ser	Glu	Gly	Leu	Ser	G1y	Trp	Ser	Gln	Ser	Va]	Met
385					390					395					400

Gly Asn His Pro Met His Gln Gln Leu Ser Asp Pro Ser Thr Phe Ser Gln His Gln Pro Met Glu Arg Asp Ser Gly Met Val Ala Pro Ser Asn Ile Phe His Gln Pro Met Gly Leu Pro Ile Ser Met Tyr Gly Gly Thr Ile Ile Pro Ser His Pro Gln Leu Ala Asp Val Pro Gly Gly Pro Leu Phe Asn Gly Leu His Asn Pro Asp Pro Ala Trp Asn Pro Met Ile Lys Val Ile Gln Asn Ser Thr Glu Cys Thr Asp Ala Gln Gln Ala Ser Leu Leu Pro Ser Val Pro Ala Leu Lys Gly Glu lle Pro Ser Pro Gln Leu Thr Arg Pro Lys Lys Arg Ile Gly Arg Pro Met Val Ala Ser Pro Asn Gln Arg His Gln Asp His Leu Arg Pro Lys Val Pro Ala Gly Val Gln Glu Leu Thr His Cys Pro Asp Thr Pro Leu Leu Pro Pro Ser Asp Ser Arg Gly His Asn Ser Ser Asn Ser Pro Ser Leu Gln Ala Gly Gly Ala Glu Gly Ala Gly Asp Arg Gly Arg Asp Thr Arg

<210> 3648

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3648

Met Phe Leu Ser Leu Lys Met Phe Cys Trp Gly Arg His Ala Met Val

1 5 10 15

Leu Arg Ile Ala Pro Phe Ser Asp Asp Leu Leu Leu Thr Ser Asp Thr

25 20 Tyr Arg Asp Ser Ala Gly Ala Cys Gln Ser Ser Asn Thr Ser Arg Asn Val Arg 11e Trp Asp Arg Arg Ser Gln Asp 11e His Leu Ala Leu Phe 50 55 Trp Glu Glu Glu Ile His Phe Leu Ala Cys Ala Gly Trp Leu Thr Pro 75 70 Val Ile Pro Gly Arg Trp Asp Tyr Gly Cys Glu Pro Pro His Pro Ala 85 90 Cys Phe Thr Ser Phe Asn Ser Val Thr Val Asp Asp Val Pro His Arg 100 105 110 Pro Ala Ser His Ala Thr Cys Glu Ser 115 120

<210> 3649

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3649

Met Val Ala Glu Glu Gly Ser Arg Cys Leu Tyr Pro Gly Gln Leu Phe 1 5 10 15

Leu Leu Leu His Phe Pro Val Val Gly Gln Cys Trp His Cys Glu Arg 20 25 30

Cys Glu Gly Tyr Asn Tyr Gln Val Asp Glu Leu Ser Cys Glu Leu Cys
35 40 45

Pro Leu Asp Gln Arg Pro Asn Met Asn Arg Thr Gly Cys Gln Leu Ile 50 55 60

Pro lle lle Lys Leu Glu Trp His Ser Pro Trp Ala Val Val Pro Val 65 70 75 80

Phe Val Ala Ile Leu Gly Ile Ile Ala Thr Thr Phe Val Ile Val Thr
85 90 95

Phe Val Arg Tyr Asn Asp Thr Pro 11e Val Arg Ala Ser Gly Arg Glu 100 105 110

Leu Ser Tyr Val Leu Leu Thr Gly 11e Phe Leu Cys Tyr Ser 11e Thr

120 125 115 Phe Leu Met Ile Ala Ala Pro Asp Thr Ile Ile Cys Ser Phe Arg Arg 135 Val Phe Leu Gly Leu Gly Met Cys Phe Ser Tyr Ala Ala Leu Leu Thr 145 150 155 160 Lys Thr Asn Arg lle His Arg lle Phe Glu Gln Gly Lys Lys Ser Val 170 Thr Ala Pro Lys Phe Ile Ser Pro Ala Ser Gln Leu Val Ile Thr Phe 185 190 Ser Leu Ile Ser Val Gln Leu Leu Gly Val Phe Val Trp Phe Val Val 195 200 205 Asp Pro Pro His Ile Ile Ile Asp Tyr Gly Glu Gln Arg Thr Leu Asp 215 220 Pro Glu Lys Ala Arg Gly Val Leu Lys Cys Asp 11e Ser Asp Leu Ser 235 225 230 240 Leu 11e Cys Ser Leu Gly Tyr Ser I1e Leu Leu Met Val Thr Cys Thr 245 250 255 Val Tyr Ala Ile Lys Thr Arg Gly Val Pro Glu Thr Phe 260 265

<210> 3650

<211> 540

<212> PRT

<213> Homo sapiens

<400> 3650

Met Arg Ala Leu Asp Asp Met Asp His Glu Gly Arg Asp Thr Leu Ala

1 5 10 15

Arg Glu Glu Leu Arg Gln Gly Leu Ser Glu Leu Pro Ala 11e His Asp

20 25 30

Leu His Gln Gly 11e Leu Glu Glu Leu Glu Glu Arg Leu Ser Asn Trp

35 40 45

Glu Ser Gln Gln Lys Val Ala Asp Val Phe Leu Ala Arg Glu Gln Gly
50 55 60

Phe Asp His His Ala Thr His Ile Leu Gln Phe Asp Arg Tyr Leu Gly

65					70					75					80
Leu	Leu	Ser	Glu	Asn	Cys	Leu	His	Ser	Pro	Arg	Leu	Ala	Ala	Ala	Val
				85					90					95	
Arg	Glu	Phe	Glu	Gln	Ser	Val	Gln	Gly	Gly	Ser	Gln	Thr	Ala	Lys	His
			100					105					110		
Arg	Leu	Leu	Arg	Val	Val	Gln	Arg	Leu	Phe	Gln	Tyr	Gln	Val	Leu	Leu
		115					120					125			
Thr	Asp	Tyr	Leu	Asn	Asn	Leu	Cys	Pro	Asp	Ser	Ala	Glu	Tyr	Лѕр	Asn
	130					135					140				
Thr	Gln	Gly	Ala	Leu	Ser	Leu	He	Ser	Lys	Val	Thr	Asp	Arg	Ala	Asn
145					150					155					160
Asp	Ser	Met	Glu	Gln	Gly	Glu	Asn	Leu	Gln	Lys	Leu	Val	His	He	Glu
				165					170					175	
His	Ser	Val	Arg	Gly	Gln	Gly	Asp	Leu	Leu	Gln	Pro	Gly	Arg	Glu	Phe
			180					185					190		
Leu	Lys	Glu	Gly	Thr	Leu	Met	Lys	Val	Thr	Gly	Lys	Asn	Arg	Arg	Pro
		195					200					205			
Arg	His	Leu	Phe	Leu	Met	Asn	Asp	Val	Leu	Leu	Tyr	Thr	Tyr	Pro	Gln
	210					215					220				
Lys	Asp	Gly	Lys	Tyr	Arg	Leu	Lys	Asn	Thr	Leu	Ala	Va]	Ala	Asn	Met
225					230					235					240
Lys	Val	Ser	Arg	Pro	Val	Met	Glu	Lys	Va]	Pro	Tyr	Ala	Leu	Lys	11e
				245					250					255	
Glu	Thr	Ser	Glu	Ser	Cys	Leu	Met	Leu	Ser	Ala	Ser	Ser	Cys	Ala	G] u
			260					265					270		
Arg	Asp		Trp	Tyr	Gly	Cys		Ser	Arg	Ala	Leu		Glu	Λsp	Tyr
		275					280					285			
Lys		Gln	Ala	Leu	Ala		Phe	His	His	Ser		Glu	lle	Arg	Glu
	290					295					300			_	
	Leu	Gly	Val	Ser		Gly	Glu	Arg	Pro		Thr	Leu	Val	Pro	
305					310				0.1	315		Б.	0		320
Thr	His	Va]	Met		Cys	Met	Asn	Cys		Cys	Asp	Phe	Ser		Thr
				325	0				330	,		., .	0	335	
Leu	Arg	Arg		His	Cys	HIS	Ala		Gly	Lys	He	va!	Cys	Arg	Asn
C.	c	Α.,	340	1.	т	p	,	345	т	1	1		350	M	A 7
1 110	> 0 r	Bro	0.00	1 17.0	1 1/20	レン	1 011	1 17 6	1 1/17	1 011	1 17 0	11 (**)	(1 1 CT	410.1	010

Lys Val Cys Asp Gly Cys Phe Gly Glu Leu Lys Lys Arg Gly Arg Ala Val Pro Gly Leu Met Arg Glu Arg Pro Val Ser Met Ser Phe Pro Leu Ser Ser Pro Arg Phe Ser Gly Ser Ala Phe Ser Ser Val Phe Gln Ser lle Asn Pro Ser Thr Phe Lys Lys Gln Lys Lys Val Pro Ser Ala Leu Thr Glu Val Ala Ala Ser Gly Glu Gly Ser Ala Ile Ser Gly Tyr Leu Ser Arg Cys Lys Arg Gly Lys Arg His Trp Lys Lys Leu Trp Phe Val lle Lys Gly Lys Val Leu Tyr Thr Tyr Met Ala Ser Glu Asp Lys Val Ala Leu Glu Ser Met Pro Leu Leu Gly Phe Thr Ile Ala Pro Glu Lys Glu Glu Gly Ser Ser Glu Val Gly Pro Ile Phe His Leu Tyr His Lys Lys Thr Leu Phe Tyr Ser Phe Lys Ala Glu Asp Thr Asn Ser Ala Gln Arg Trp Ile Glu Ala Met Glu Asp Ala Ser Val Leu

<210> 3651

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3651

 Met
 Pro
 Arg
 Gly
 Phe
 His
 Asn
 Asn
 Asn
 11e
 Lys
 Ala
 11e
 Pro
 Glu
 Lys

 1
 5
 10
 15
 15

 Ala
 Phe
 Met
 Gly
 Asn
 Pro
 Leu
 Leu
 Gln
 Thr
 He
 His
 Phe
 Tyr
 Asp
 Asn

 20
 25
 25
 30
 30
 Pro
 Leu
 Pro
 Leu
 Pro
 Leu
 Pro
 Leu
 Leu
 Pro
 Leu
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 Pro
 Leu
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 Pro
 Leu
 Leu
 Pro
 Leu

		35					40					45			
His	Thr	Leu	Ser	Leu	Asn	G1 y	Ala	Met	Asp	Пe	Gln	Glu	Phe	Pro	Asp
	50					55					60				
Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	He	Leu	Thr	Leu	Thr	Arg	Ala	Gly
65					70					75					80
He	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys	Gln	Gln	Leu	Pro	Arg	Leu	Arg
				85					90					95	
Val	Leu	Glu	Leu	Ser	His	Asn	Gln	He	Glu	Glu	Leu	Pro	Ser	Leu	His
			100					105					110		
Arg	Cys	Gln	Lys	Leu	Glu	Glu	lle	Gly	Leu	Gln	His	Asn	Arg	Ile	Trp
		115					120					125			
Glu	Пе	Gly	Ala	Asp	Thr	Phe	Ser	Gln	Leu	Ser	Ser	Cys	Asp	Ser	Thr
	130					135					140				
Gln	Λla	Leu	Val	Ala	Phe	Ser	Λsp	Val	Asp	Leu	He	Leu	Glu	Ala	Ser
145					150					155					160
Glu	Ala	Gly	Arg	Pro	Pro	Gly	Leu	Glu	Thr	Tyr	Gly	Phe	Pro	Ser	Val
				165					170					175	
Thr	Leu	lle	Ser	Cys	Gln	Gln	Pro	Gly	Ala	Pro	Arg	Leu	Glu	Gly	Ser
			180					185					190		
His	Cys	Val	Glu	Pro	Glu	Gly	Asn	His	Phe	G1 y	Asn	Pro	Gln	Pro	Ser
		195					200					205			
Met	Asp	Gly	Glu	Leu	Leu	Leu	Arg	Ala	Glu	Gly	Ser	Thr	Pro	Ala	Gly
	210					215					220				
	G] y	Leu	Ser	Gly		G1 y	Gly	Phe	Gln		Ser	Gly	Leu	Ala	
225					230					235					240
Ala	Ser	His	Va]												

<210> 3652

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3652

Met Ala His Asn Pro Asn Met Thr His Leu Lys lle Asn Leu Pro Val

l				5					10					15	
Thr	Ala	Leu	Pro	Pro	Leu	Trp	Val	Arg	Cys	Asp	Ser	Ser	Asp	Pro	Glu
			20					25					30		
Gly	Thr	Cys	Trp	Leu	Gly	Ala	Glu	Leu	lle	Thr	Thr	Asn	Asn	Ser	He
		35					40					45			
Thr	Gly	He	Val	Leu	Tyr	Val	Val	Ser	Cys	Lys	Ala	Asp	Lys	۸sn	Tyr
	50					55					60				
Ser	Val	Asn	Leu	Glu	Asn	Leu	Lys	Asn	Leu	His	Lys	Lys	Arg	His	His
65					70					75					80
Leu	Ser	Thr	Val	Thr	Ser	Lys	Gly	Phe	Ala	Gln	Tyr	Glu	Leu	Phe	Lys
				85					90					95	
Ser	Ser	Ala	Leu	Asp	Asp	Thr	He	Thr	Ala	Ser	Gln	Thr	Ala	11e	Ala
			100					105					110		
Leu	Asp	11e	Ser	Trp	Ser	Pro	Val	Asp	Glu	lle	Leu	Gln	He	Pro	Pro
		115					120					125			
Leu	Ser	Ser	Thr	Ala	Thr	Leu	Asn	lle	Lys	Val	Glu	Ser	Gly	Glu	Pro
	130					135					140				
Arg	Gly	Pro	Leu	Asn	His	Leu	Tyr	Arg	Glu	Leu	Lys	Phe	Leu	Leu	Val
145					150					155					160
Leu	Ala	Asp	Gly	Leu	Arg	Thr	Gly	Val	Thr	Glu	Trp	Leu	Glu		Leu
				165					170					175	
Glu	Ala	Lys	Ser	Ala	Val	Glu	Leu	Val	Gln	Glu	Phe	Leu	Asn	Asp	Leu
			180					185					190		
Asn	Lys		Asp	Gly	Phe	Gly	Asp	Ser	Thr	Lys	Lys		Thr	Glu	Val
0.7	mı.	195				m.	200	. 1	., 1			205	., .		
Glu		Leu	Lys	His	Asp		Ala	Ala	Val	Asp			Val	Lys	Arg
	210 Di	,	17 3		C	215			DI	4.7	220			т	C
	Phe	Lys	val	Arg		Asp	Leu	Asp	Pne		GIU	GIn	Leu	rp	
225	U.a	C	C	C	230	11.	C	т	C1 :-	235	1	Va.1	Lua	Cus	240
Lys	ne t	ser	ser		vai	116	Ser	I y I		ASP	Leu	val	LyS	255	rne
The	Lou	116	Ha	245	Son	Lau	Cla	Ana	250	Acn	110	Gla	Pro		Lou
1111	Leu	116		GIII	261	Leu	GIn		илу	nsp	116	0111	270	пр	Leu
Hie	Sor	Glv	260 Ser	Acr	Sor	Lou	Leu	265 Ser	lve	ا ما	مال	Hie		Sar	Tur
1112	261	275	⊃¢1	ASH	Sei	ren	280	261	Lys	Leu	.116	285	0111	SGI	1 y 1
Hie	G1v		Met	Aen	Thr	Val	Sor	Lau	Ser	G1 v	Thr		Pro	Val	Gla

Met Leu Leu Glu 11e Gly Leu Asp Lys Leu Lys Lys Asp Tyr 11e Ser Phe Phe 11e Gly Gln Glu Leu Ala Ser Leu Asn His Leu Glu Tyr Phe Ile Ala Pro Ser Val Asp Ile Gln Glu Gln Val Tyr Arg Val Gln Lys Leu His His Ile Leu Glu Ile Leu Val Ser Cys Met Pro Phe Ile Lys Ser Gln His Glu Leu Leu Phe Ser Leu Thr Gln Ile Cys Ile Lys Tyr Tyr Lys Gln Asn Pro Leu Asp Glu Gln His Ile Phe Gln Leu Pro Val Arg Pro Thr Ala Val Lys Asn Leu Tyr Gln Ser Glu Lys Pro Gln Lys Trp Arg Val Glu 11e Tyr Ser Gly Gln Lys Lys 11e Lys Thr Val Trp Gln Leu Ser Asp Ser Ser Pro Ile Asp His Leu Asn Phe His Lys Pro Asp Phe Ser Glu Leu Thr Leu Asn Gly Ser Leu Glu Glu Arg Ile Phe Phe Thr Asn Met Val Thr Cys Ser Gln Val His Phe Lys

<210> 3653

<211> 486

<212> PRT

<213> Homo sapiens

⟨400⟩ 3653

 Met Leu Gly Glu Gly Ile Lys Glu Arg Gln Arg Arg Ile Lys Glu Phe

 1
 5
 10
 15

 Gln Glu Lys Ile Asp Lys Val Glu Asp Asp Ile Phe Gln His Phe Cys
 20
 25
 30

Glu Glu Ile Gly Val Glu Asn lle Arg Glu Phe Glu Asn Lys His Val

		35					40					45			
Lys	Arg	Gln	Gln	Glu	Пе	Asp	Gln	Lys	Arg	Leu	Glu	Phe	Glu	Lys	Gln
	50					55					60				
Lys	Thr	Arg	Leu	Asn	Val	Gln	Leu	G1u	Tyr	Ser	Arg	Ser	His	Leu	Lys
65					70					75					80
Lys	Lys	Leu	Asn	Lys	Ile	Asn	Thr	Leu	Lys	Glu	Thr	lle	Gln	Lys	Gly
				85					90					95	
Ser	Glu	Asp	lle	Asp	llis	Leu	Lys	Lys	Ala	Glu	Glu	Asn	Cys	Leu	Gln
			100					105					110		
Thr	Val	Asn	Glu	Leu	Met	Ala	Lys	G1n	Gln	Gln	Leu	Lys	Asp	lle	Arg
		115					120					125			
Val	Thr	Gln	Asn	Ser	Ser	Ala	Glu	Lys	Val	Gln	Thr	G1n]]e	Glu	Glu
	130					135					140				
Glu	Arg	Lys	Lys	Phe	Leu	Ala	Val	Лsр	Arg	Glu	Val	Gly	Lys	Leu	Gln
145					150					155					160
Lys	Glu	Val	Val	Ser	He	Gln	Thr	Ser	Leu	Glu	Gln	Lys	Arg	Leu	Glu
				165					170					175	
Lys	His	Asn	Leu	Leu	Leu	Asp	Cys	Lys	Val	Gln	Asp	He	Glu	He	He
			180					185					190		
Leu	Leu	Ser	Gly	Ser	Leu	Asp	Asp	He	Ile	Glu	Val	Glu	Met	Gly	Thr
		195					200					205			
Glu	Ala	Glu	Ser	Thr	Gln	Ala	Thr	He	Asp	lle	Tyr	Glu	Lys	Glu	Glu
	210					215					220				
Ala	Phe	Glu	lle	Asp	Tyr	Ser	Ser	Leu	Lys	Glu	Asp	Leu	Lys	Ala	Leu
225					230					235					240
Gln	Ser	Asp	Gln	Glu	He	Glu	Ala	His				Leu	Leu		Gln
				245										255	
Val	Ala	Ser		Glu	Asp	He	Leu		Lys	Thr	Ala	Ala		Asn	Leu
			260		_			265					270		
Arg	Ala		Glu	Asn	Leu	Lvs	Thr	Val	Arg	Asp	Lys		GIn	Glu	Ser
m.		275	151	61			280		61			285	0		61
lhr		Ala	Phe	Glu	Ala		Arg	Lys	Glu	Ala		Met	Cys	Arg	GIn
C 1	290	C1	C1.	W. 1	1.	295	Α.	A -	т	Δ	300	DI -	TI.	C L	C
	rne	GIU	GIN	vaı		Lys	Arg	Arg	ıyr		Leu	rne	ınr	GIN	
305	C1.	D.: -	Ve 1	C	310	C	т1.	Λ	C1	315	т	1	1	1	320
rne	oiu	nis	val	ser	116	ser	He	ASP	om	116	ıyr	LyS	Lys	ren	Cys

				325					330					335	
Arg	Asn	Asn	Ser	Λla	Gln	Ala	Phe	Leu	Ser	Pro	Glu	Asn	Pro	Glu	Glu
			340					345					350		
Pro	Tyr	Leu	Glu	Gly	He	Ser	Tyr	Asn	Cys	Val	Ala	Pro	Gly	Lys	Arg
		355					360					365			
Phe	Met	Pro	Met	Asp	Asn	Leu	Ser	Gly	Gly	Glu	Lys	Cys	Val	Ala	Ala
	370					375					380				
Leu	Ala	Leu	Leu	Phe	Ala	Йаl	His	Ser	Phe	Arg	Pro	Ala	Pro	Phe	Phe
385					390					395					400
Val	Leu	Asp	Glu	Val	Asp	Ala	Ala	Leu	Asp	Asn	Thr	Asn	Пe	Gly	Lys
				405					410					415	
Val	Ser	Ser	Tyr	lle	Lys	Glu	Gln	Thr	Gln	Asp	Gln	Phe	Gln	Met	11e
			420					425					430		
Val	He	Ser	Leu	Lys	G1u	Glu	Phe	Tyr	Ser	Arg	Ala	Asp	Ala	Leu	He
		435					440					445			
Gly	lle	Tyr	Pro	Glu	Tyr	Asp	Asp	Cys	Met	Phe	Ser	Arg	Val	Leu	Thr
	450					455					460				
Leu	Asp	Leu	Ser	Gln	Tyr	Pro	Asp	Thr	Glu	Gly	Gln	Glu	Ser	Ser	Lys
465					470					475					480
Arg	His	Gly	Glu	Ser	Arg										
				485											

<210> 3654

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3654

Met Gly Asn His Glu Leu Met Thr Ser Trp Leu Leu Asp Val Arg Lys 1 5 5 10 15 15 Asn Leu Gln Ser Gln Arg Glu Leu Ser Lys Phe Cys Pro Glu Gln Thr 20 25 30 Glu Gly Trp Arg Cys His Arg Leu Arg Trp Glu Asn Gly Arg Cys His 35 40 45 Arg Leu Gln Gly Lys Val Gly Asp Gln Leu Arg Ala Pro Glu Pro Ser

Trp Lys Glu Phe Pro Ile Gln Pro Ala Ser Val Ser Ala Ser Val Leu Phe Leu Met Thr Leu Arg Val Leu Ala Ser Gly Ser Phe Met Met Gln Arg Val Pro Pro Ser His Pro Gly Arg Leu Arg Ala Pro Ala Ser Ser Trp Gln Pro Gly Ala Arg Leu Arg Ile Trp Arg Pro Thr Thr Gly Trp Ser Leu Ala Ala Thr Ser Gln Arg Arg Val Ser Ser Pro Val Val Ser Cys Gly Arg Val Ala Val Thr Arg Ser Arg Thr Arg Asp Ser Trp Pro Trp Cys Pro Ser Arg Ser Pro Arg Cys Val Ala Cys Arg Leu Phe Phe

<210> 3655

<211> 470

<212> PRT

<213> Homo sapiens

<400> 3655

Met Arg Gly His Lys Gly Ala Lys Gly Glu 11e Gly Glu Pro Gly Arg Gln Gly His Lys Gly Glu Glu Gly Asp Gln Gly Glu Leu Gly Glu Val Gly Ala Gln Gly Pro Pro Gly Ala Gln Gly Leu Arg Gly Ile Thr Gly lle Val Gly Asp Lys Gly Glu Lys Gly Ala Arg Gly Leu Asp Gly Glu Pro Gly Pro Gln Gly Leu Pro Gly Ala Pro Gly Asp Gln Gly Gln Arg Gly Pro Pro Gly Glu Ala Gly Pro Lys Gly Asp Arg Gly Ala Glu Gly

Ala Arg Gly lle Pro Gly Leu Pro Gly Pro Lys Gly Asp Thr Gly Leu

			100					105					110		
Pro	Gly	Val	Asp	Gly	Arg	Asp	Gly	lle	Pro	G1 y	Met	Pro	Gly	Thr	Lys
		115					120					125			
Gly	Glu	Pro	Gly	Lys	Pro	Gly	Pro	Pro	Gly	Лѕр	Ala	Gly	Leu	Gln	Gly
	130					135					140				
Leu	Pro	Gly	Val	Pro	Gly	He	Pro	Gly	Ala	Lys	Gly	Val	Ala	Gly	Glu
145					150					155					160
Lys	Gly	Ser	Thr	Gly	Ala	Pro	Gly	Lys	Pro	Gly	Gln	Met	Gly	Asn	Ser
				165					170					1,75	
Gly	Lys	Pro	Gly	Gln	Gln	G1 y	Pro	Pro	Gly	Glu	Val	Gly	Pro	Arg	Gly
			180					185					190		
Pro	Gln	Gly	Leu	Pro	Gly	Ser	Arg	Gly	Glu	Leu	Gly	Pro	Val	Gly	Ser
		195					200					205	1		
Pro	Gly	Leu	Pro	Gly	Lys	Leu	Gly	Val	Val	Gly	Glu	Pro	Gly	Pro	Lys
	210					215					220				
Gly	Glu	G1n	Gly	Ala	Ser	Gly	Glu	Glu	Gly	Glu	Ala	Gly	Glu	Arg	Gly
225					230					235					240
Glu	Leu	Gly	Asp	lle	Gly	Leu	Pro	Gly	Pro	Lys	Gly	Ser	Ala	Gly	Asn
				245					250					255	
Pro	Gly	Glu	Pro	Gly	Leu	Arg	Gly	Pro	Glu	Gly	Ser	Arg	Gly	Leu	Pro
			260					265					270		
Gly	Val	Glu	Gly	Pro	Arg	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Val	Gln	Gly
		275					280					285			
Glu	Gln	Gly	Ala	Thr	Gly	Leu	Pro	Gly	Val	Gln	Gly	Pro	Pro	Gly	Arg
	290					295					300				
Ala	Pro	Thr	Asp	Gln	His	lle	Lys	Gln	Val	Cys	Met	Arg	Val	lle	Gln
305					310					315					320
Glu	His	Phe	Ala	Glu	Met	Ala	Ala	Ser	Leu	Lys	Arg	Pro	Asp	Ser	Gly
				325					330					335	
Ala	Thr	Gly	Leu	Pro	Gly	Arg	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro
			340					345					350		
Pro	Gly	Glu	Asn	Gly	Phe	Pro	Gly	Gln	Met	Gly	lle	Arg	Gly	Leu	Pro
		355					360					365			
Gly	He	Lys	Gly	Pro	Pro	Gly	Ala	Leu	Gly	Leu	Arg	G1 y	Pro	Lys	Gly
	370					375					380				
Asp	Leu	G1y	Glu	Lys	Gly	Glu	Arg	Gly	Pro	Pro	Gly	Arg	Gly	Pro	Asn

Gly Leu Pro Gly Ala Ile Gly Leu Pro Gly Asp Pro Gly Pro Ala Ser Tyr Gly Arg Asn Gly Arg Asp Gly Glu Arg Gly Pro Pro Gly Val Ala Gly 11e Pro Gly Val Pro Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly Phe Cys Glu Pro Ala Ser Cys Thr Met Gln Ala Gly Gln Arg Ala Phe Asn Lys Gly Pro Asp Pro <210> 3656 <211> 136 <212> PRT <213> Homo sapiens <400> 3656 Met His Glu Pro Leu Cys Pro Ala Ser Cys Cys Phe Tyr Thr Phe Ser Ile Ala Ile Thr Val Phe Asp Gly Ser Phe Cys Phe Phe Glu Phe Leu lle Phe lle Thr Pro Ala Ser Ser Ala Thr Leu Lys Asp Leu Glu Ser Ser Ser Arg Cys Glu Ala Val Leu Lys Arg Gln Leu Trp Gln Ser 11e Lys Ala Arg Ala Gln Leu Glu Ala His Val Thr Gln Met Leu Glu Gln Val Gln Leu Glu Thr Asp Glu Tyr Thr Gln His Leu Lys Gly Glu Arg Ala Arg Trp Gln Gln Arg Val Trp Lys Met Ser Glu Glu Val Cys Thr Trp Lys Glu Glu Lys Lys His Asp Arg His Arg Val Gln Glu Leu Glu

Arg Ser Leu Ala Glu Leu Lys Asn

130 135

<210> 3657

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3657

Met Leu Lys Val Ser Ile Trp Ser Ala Phe Gly Pro Met Leu Asn Leu

1 5 10 15

Phe Asn Ser lle Leu Tyr Arg Ser Asn lle Val Pro Glu Ser Ala Glu 20 25 30

Ala Ala Arg Lys Glu Val Ser Ser Arg Thr Lys Leu His 11e Phe Leu 35 40 45

Gly Arg Ser Ala Ser Leu Leu Arg Pro Asn Gly His Ser Leu Ala Arg 50 55 60

Trp Leu Glu Thr Thr Val Leu Glu Arg Thr Gln Gly Lys 1le Ser Arg
65 70 75 80

Arg Asn Pro Asn Arg Lys 11e Tyr Phe 11e His Phe Leu Gln Lys Met 85 90 95

His Pro IIe IIe Ala Tyr Ser Pro Pro Thr Trp Thr Ala His Ser Val 100 105 110

Asn His Val Leu Gln Val Arg Phe Gly Tyr 115 120

<210> 3658

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3658

Met Lys Pro His Ala Glu Gln IIe Gln Leu Leu Gly Lys Gln Gly Ala 1 5 10 15 Ala Val Ser Gln Leu Cys Pro Leu Val Leu Val Ser Gly His Ile Cys 20 25 Arg Glu Glu Arg Arg His Phe Gln Arg lle Ala Leu Thr Ala Ser Ser 40 45 Leu Ser Cys Gly Ser Gln Leu Lys Trp His Leu Leu Gln Glu Ala Phe 50 60 55 Pro Asp Phe Leu Pro Phe Ser Val Leu Pro Val Ser Trp Thr Ala Arg 70 75 Ala Thr Asp Val Leu Ala Leu Ser Val Asp Met Ala Cys Ser Leu Leu 85 90 95 Pro His Trp Thr Gly His Ser Ala Arg Ala Lys Thr Val Phe Gly Pro 105 Ser Leu Trp Leu Gln Leu Cys Leu Ala Gln Val Gln Ala Gln Tyr Gly 120 125 Cys Ser Leu Met Phe Ala Glu 130 135

<210> 3659

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3659

Met Ser His Arg Ala Trp Leu 11e Leu Ala Phe Phe Phe 11e Phe Tyr

1 5 10 15

Tyr Phe Phe Lys 11e Glu Ser Cys Ser Val Ala Gln Ala Gly Val Gln
20 25 30

Trp His Ser Leu Ser Ser Val Gln Pro Pro Pro Pro Arg Phe Lys Gln
35 40 45

Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Asn Arg His Met Pro 50 55 60

Pro Arg Leu Arg Leu Ile Val Gly Gly Arg Ala Cys Ile Ile Val Pro 65 70 75 80

Leu His Ser Ser Leu Gly Asn Arg Ala Arg Leu Cys Leu Pro Asn Lys

85 90 95

Ala Glu Lys Asp Tyr Leu Arg Glu 100

⟨210⟩ 3660

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3660

Met Ser Lys Lys His Gln Asn Asp Cys Thr Cys Asp Arg Ser Cys Lys

1 5 10 15

Asn Asn Ala Thr Lys Gly Phe Pro Thr Thr Ser Arg Met Gln Thr Arg
20 25 30

Lys Phe Gly Pro Lys Ala Leu Leu Phe Leu Tyr Val Arg Met Pro Asn 35 40 45

Ser Leu Ala Gly Lys Arg Pro Ile Met Gln Ile Lys Tyr Thr Ser Asn 50 55 60

Phe Ser Pro Glu Lys Gln Leu Trp Leu Gln Val Leu Leu Lys Gln Ala 65 70 75 80

Leu Gln Gln Arg Cys Tyr Ser Leu Ala Leu Arg Arg Asn Lys Asn Ser 85 90 95

Pro Ser Glu Val Tyr Glu Arg Val Arg Asn Cys Glu 100 105

<210> 3661

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3661

Met Ser Pro Leu Pro Ser Thr Leu Pro Gln Gly Thr Ser Cys Pro Ala 1 5 10 15

Leu Pro Leu Leu Pro Gly Arg Pro Cys Ala Ala Ala Leu Phe Val

20 25 30

Arg His Pro Phe Pro Gly Val Pro Leu Ser Phe Pro Leu Thr Leu Leu Ile Ala Leu Leu Ser Ser Pro Leu Tyr Ser Ser Pro His Ser Leu Ser Ser His Pro Gln Pro Asp Leu Thr Ala Cys Lys Ser His Pro Gly Glu Met Val Ser Leu Leu Gly Gln Phe Pro Gly Gly Pro Glu Leu Pro Gly Leu Val Asp Ser Gln Gln Arg Pro Gly Arg His Gly Glu Ser Lys Thr Met Ala Ser Glu His Ser Ala Trp Pro Ala Pro Phe Leu Ser Cys Leu Gly Ser Gln Thr Ala Gln Ala Ser Ala Phe Glu Leu Ala Ser Pro Trp Asn Leu Val Cys Asn His Gly Ala Asn Cys Arg Thr Arg Gly Arg Glu Gly Arg Gly Val Lys Ser Ile Glu Ser Val Leu Lys Glu Gly Gly Asp Trp Thr Thr <210> 3662 <211> 198 <212> PRT <213> Homo sapiens <400> 3662 Met Arg Ala Pro Ala Gln Val Arg Thr Leu Arg Trp Ser Leu Gly Trp Pro Gly Ser Arg Gly Arg Asp Val Phe Ala Ala Leu Arg Cys Ala Gln

Ala Leu Arg Cys Gln Pro Leu Gly Ser Ala Leu Pro Pro Gln Ala Pro

Thr Arg Asp Leu Gly Arg Pro Gln Ala Phe Asp Ser Ser Arg Thr Pro

	50					55					60				
Gly	Pro	Arg	Pro	Pro	Arg	Ser	Thr	Leu	Arg	Met	Met	Glu	Thr	Lys	Ser
65					70					75					80
Pro	Thr	Ser	Pro	Ser	Tyr	Gly	Ala	Arg	Gly	Lys	Val	Pro	Pro	Gly	Ala
				85					90					95	
Gly	Pro	Gly	Ser	Pro	Leu	Ser	Arg	Gly	Ala	Gly	Gln	Gly	Ala	Pro	Leu
			100					105					110		
Ser	Glu	Thr	Arg	Phe	His	His	Val	Ala	Gln	Ala	Phe	Leu	Lys	Leu	Leu
		115					120					125			
Ser		Ser	Asn	Pro	Pro	Thr	Ser	Ala	Ser	Glu	Ser	Ala	Arg	He	Ile
	130					135					140				
	Val	Ser	His	Cys		G1n	Pro	Gln	Val		Ser	Leu	Ser	Asp	
145					150					155					160
							m.	., .	,	0	Б		,	0.1	1
His	Cys	Ser	Lys		Asn	His	Thr	Val		Ser	Pro	Arg	Lys		Val
n	,	61	,	165	. 1	4.7		C	170	C	C1	C1	v 1	175	4.1
Pro	Leu	GIn		inr	Ala	Ala	HIS		Ser	Ser	GIn	GIU		Leu	Ala
Tha	V _o 1	Dwa	180	ш÷а	C1			185					190		
1111	Val	195	rne	1112	оту										
		190													
													•		
(21 6)> 36	363													
	1> 46														
	2> PI														
	3> He		sapie	ens											
<400)> 3 6	663													
Met	Lys	Glu	Pro	Leu	Leu	Gly	Gl y	Glu	Cys	Asp	Lys	Ala	Va]	Ala	Ser
1				5					10					15	
Gln	Leu	Gly	Leu	Leu	Asp	G] u	lle	Lys	Thr	Glu	Pro	Asp	Asn	Ala	Gln
			20					25					30		
Glu	Tyr	Cys	His	Arg	Gln	Gln	Ser	Arg	Thr	Gln	Glu	Asn	Glu	Leu	Lys
		35					40					45			
116	A 015	110	$V_{\odot}1$	Dhe	C 0.7-	C1	C	۸1.	C	C1.	1	The	A 1 a	C1.	11.

	50					55					60				
Gln	Leu	Ser	Leu	Ala	Ser	Ser	Gly	Val	Asn	Lys	Met	Leu	Pro	Ser	Val
65					70					75					80
Ser	Thr	Thr	Ala	lle	Gln	Val	Ser	Cys	Ala	Gly	Cys	Lys	Lys	He	Leu
				85					90					95	
Gln	Lys	Gly	Gln	Thr	Ala	Tyr	Gln	Arg	Lys	Gly	Ser	Ala	Gln	Leu	Phe
			100					105					110		
Cys	Ser	lle	Pro	Cys	lle	Thr	Glu	Tyr	Ile	Ser	Ser	Ala	Ser	Ser	Pro
		115			,		120					125			
Val	Pro	Ser	Lys	Arg	Thr	Cys	Ser	Asn	Cys	Ser	Lys	Asp	Ile	Leu	Asn
	130					135					140				
Pro	Lys	Asp	Val	Ile	Ser	Val	Gln	Leu	Glu	Asp	Thr	Thr	Ser	Cys	Lys
145					150					155					160
Thr	Phe	Cys	Ser	Leu	Ser	Cys	Leu	Ser	Ser	Tyr	Glu	Glu	Lys	Arg	Lys
				165					170					175	
Pro	Phe	Val	Thr	He	Cys	Thr	Asn	Ser	Ile	Leu	Thr	Lys	Cys	Ser	Met
			180					185					190		
Cys	Gln		Thr	Ala	lle	Ile		Tyr	Glu	Val	Lys	Tyr	Gln	Asn	Val
		195					200					205			
Lys		Asn	Leu	Cys	Ser	Asn	Ala	Cys	Leu	Ser	Lys	Phe	His	Ser	Ala
	210					215					220				
	Asn	Phe	He	Met		Cys	Cys	Glu	Asn		G1 y	Thr	Tyr	Cys	
225					230					235				_	240
Thr	Ser	Ser	Ser		Ser	His	He	Leu		Met	Glu	GIy	GIn		His
T	D.			245			7.1	TT.	250	T		61		255	
lyr	Phe	Asn		Ser	Lys	Ser	He		Ala	lyr	Lys	GIn		Pro	Ala
1	D	1	260	C	17 . 1	D	C	265	D	,		D	270		C1
Lys	Pro		116	Ser	val	Pro		Lys	rro	Leu	Lys		Ser	Asp	GTu
Mod	Ha	275	Thm	Tha	Com	Aan	280	C1	Luc	Tha	C1	285	Dlac	Cua	C
мет	290	Giu	1111	1111	ser	Asp 295	reu	Gly	Lys	HIL	300	Leu	rne	Cys	261.
110		Cvc	Pho	Sor	Al a	Tyr	Sor	Lvc	Ala	Lvc		Clu	Sor	Sor	San
305	NSII	Cys	THE	361	310	1 y 1	361	Lys	Міа	315	Me C	Olu	261	361	320
	Ser	Val	Val	Ser		Val	Hie	Aen	Thr		Thr	61 n	Leu	Leu	
	501	, 01	, u 1	325	, 01	, 01	1113	пор	330	501	1111	Olu	LCU	335	201
Pro	Lve	lve	Acn		The	Pro	Val	110		Acn	T lo	Val	Sor		A10

Asp Thr Asp Val Ala Leu Pro IIe Met Asn Thr Asp Val Leu Gln Asp Thr Val Ser Ser Val Thr Ala Thr Ala Asp Val lle Val Asp Leu Ser Lys Ser Ser Pro Ser Glu Pro Ser Asn Ala Val Ala Ser Ser Ser Thr Glu Gln Pro Ser Val Ser Pro Ser Ser Ser Val Phe Ser Gln His Ala Ile Gly Ser Ser Thr Glu Val Gln Lys Asp Asn Met Lys Ser Met Lys lle Ser Asp Glu Leu Cys His Pro Lys Cys Thr Ser Lys Val Gln Lys Val Lys Gly Lys Ser Arg Ser 11e Lys Lys Ser Cys Cys

<210> 3664

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3664

Met Phe Thr Trp Pro lle Ser Arg Pro Arg Val Pro Leu Thr Arg Gly Phe Phe Phe Phe Leu Phe Leu Phe Phe Phe Leu Gln Gly Gly Ile Met Gly Leu Trp Phe Phe Ser Pro Pro Thr Gly Arg Gly Ser Val Tyr Val Ala Cys Gly Asn Arg Ile Gly Gly Asn Glu Leu Arg Phe Pro Arg Val Gly Lys Arg Glu Val Lys Ser Gly Ala Thr Pro Pro Val Leu Trp Arg Asn Ser Pro Asn Thr Glu Lys Lys Gly Ala Val Gly Val Leu Leu

Cys Leu Gln Val Arg Val Val Ser Ala Thr Gly Ala Arg His

100 105 110

<210> 3665

<211> 259

<212> PRT

<213> Homo sapiens

<400> 3665

Met Ala Ser Pro Gln Gly Gly Gln Ile Ala Ile Ala Met Arg Leu Arg

1 5 10 15

Asn Gln Leu Gln Ser Val Tyr Lys Met Asp Pro Leu Arg Asn Glu Glu
20 25 30

Glu Val Arg Val Lys 11e Lys Asp Leu Asn Glu His 11e Val Cys Cys 35 40 45

Leu Cys Ala Gly Tyr Phe Val Asp Ala Thr Thr Ile Thr Glu Cys Leu 50 55 60

His Thr Phe Cys Lys Ser Cys Ile Val Lys Tyr Leu Gln Thr Ser Lys
65 70 75 80

Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln Pro Leu Leu 85 90 95

Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr Lys Leu Val
100 105 110

Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg lle Arg Glu Phe Tyr Gln
115 120 125

Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu Glu Pro Ala 130 135 140

Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His Ser Lys Ala 145 150 155 160

His Tyr Tyr Arg Tyr Asp Glu Gln Leu Asn Leu Cys Leu Glu Arg Leu 165 170 175

Ser Ser Gly Lys Asp Lys Asn Lys Ser Val Leu Gln Asn Lys Tyr Val 180 185 190

Arg Cys Ser Val Arg Ala Glu Val Arg His Leu Arg Arg Val Leu Cys 195 200 205

His Arg Leu Met Leu Asn Pro Gln His Val Gln Leu Leu Phe Asp Asn

| Second Control of Co

<210> 3666

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3666

Met Lys Arg Thr Leu Glu Thr Met Arg Asn Thr Met Gly Glu Glu Thr

1 5 10 15

Gly Glu Leu Trp Ser His Lys Pro Gly Phe Arg Ser Gln Phe Cys His
20 25 30

Ser Pro Thr Glu Trp Pro Arg Thr Ala Phe Phe Arg Glu Gln Glu Gly
35 40 45

Ala Ala Ser Leu Ser lle Ala Trp Asp His Ile Gln Thr Gly Asp Val 50 55 60

Ala Arg Ser Lys Ser Thr Ser Val Gly 11e Leu Val Asp Pro Gly Asp
65 70 75 80

Pro Leu Leu Arg Glu Leu Leu Arg Gly Leu Gly Tyr Asp Ser Arg 85 90 95

Thr Lys Ser Phe Gly Arg Asp Phe Pro Ser Leu Asp Lys Glu Lys Glu
100 105 110

Val Glu Leu Pro Ala Ala Ala Leu Gly Gly

115 120

<210> 3667

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3667 Met Leu Cys Val Tyr Phe Phe Lys Gly Ile Glu Asp Asn Asp Glu Leu Pro Ser Ala Lys Gly Arg Lys Val Leu Arg Ser Leu Val Val Cys Glu Asn Gly Leu Pro 11e Lys Glu Gly Leu Ser Cys Asn Gly Pro Arg Pro Val Gly Leu Arg Ser Thr Leu Gln Gly Arg Gly Glu Met Val Glu Gln Leu Arg Glu Leu Thr Arg Leu Leu Glu Ala Lys Asp Phe Arg Ser Arg Met Glu Gly Val Gly Gln Leu Leu Glu Leu Cys Lys Ala Lys Thr Glu Leu Val Thr Ala His Leu Val Gln Val Phe Asp Ala Phe Thr Pro Arg Leu Gln Asp Ser Asn Lys Lys Val Asn Gln Trp Ala Leu Glu Ser Phe Ala Lys Met Ile Pro Leu Leu Arg Glu Ser Leu His Pro Met Leu Leu Ser Ile Ile Ile Thr Val Ala Asp Asn Leu Asn Ser Lys Asn Ser Gly lle Tyr Ala Ala Ala Val Ala Val Leu Asp Ala Met Val Glu Ser Leu Asp Asn Leu Cys Leu Leu Pro Ala Leu Ala Gly Arg Val Arg Phe Leu Ser Gly Arg Ala Val Leu Asp Val Thr Asp Arg Leu Ala Gly Glu His Pro Gln Pro His Pro Thr Pro Ser Pro Gly Arg Phe Leu Phe Ser Pro Gly Leu Trp Leu Asn His Ser Pro Ser Tyr Leu Arg Pro Glu 11e 11e

Pro Pro Asn His Leu Lys Phe

<210> 3668 <211> 168 <212> PRT <213> Homo sapiens <400> 3668 Met Arg Arg Asp Arg Gly Pro Lys Pro Ala Leu Gly Gly Ala Gly Glu 10 Val Glu Pro Gly Gly Met Ala Ala Ser Pro Thr Gly Arg Pro Arg Arg 20 25 30 Leu Gln Arg Tyr Leu Gln Ser Gly Glu Phe Asp Gln Phe Arg Asp Phe 40 45 Pro lle Phe Glu Ser Asn Phe Val Gln Val Thr Arg Leu Gly Glu Val 50 55 Ala Asn Glu Val Thr Met Gly Val Ala Ala Ser Ser Pro Ala Leu Glu 70 75 Leu Pro Asp Leu Leu Leu Leu Ala Gly Pro Ala Lys Glu Asn Gly His 90 Leu Gln Leu Phe Gly Leu Phe Pro Leu Lys Phe Val Gln Leu Phe Val 100 105 His Asp Lys Ser Arg Cys Gln Leu Glu Val Lys Leu Asn Thr Ser Arg 120 125 Thr Phe Tyr Leu Gln Leu Arg Ala Pro Leu Lys Thr Arg Asp Arg Glu 130 135 140 Phe Gly Gln Trp Val Arg Leu Leu Tyr Arg Leu Arg Phe Leu Ser Ala

155

160

<210> 3669

<211> 185

<212> PRT

<213> Homo sapiens

150

Ser Ala Val Pro Phe Thr Gln Glu 165

<400> 3669 Met Pro Val Cys Ser Ala Met Gly Arg Ile Leu Trp Met Lys Ala Lys 5 10 Gly Ser Ala Asn Ser Ser Gln Leu Gly Ser Lys Thr Gly His Ser Gly 20 25 30 Gly Gly Arg Asn Ser Pro Ser Gly Pro Gly Pro Pro Arg Gly Ser Ala 40 45 Gly Arg Gly Pro Gly Cys Ser Val Val Ala Ala Ser Ile Thr Ala Gly 50 55 Trp Ala Arg Ala Arg Arg Arg Trp Ala Pro Gly Pro Arg Leu Arg Ala Pro Leu Gly Pro Arg Pro Val Gln Thr Arg Leu Glu Gln Gln Gln Val 85 90 Arg Val Val Arg Ala Thr Ala Ala Pro Trp Ala Phe Ser Ala Ser Asp 100 105 110 Asp Asp Val Ser Pro Gln Ala His Ala Val Arg Leu Arg Arg His Gly 120 125 Glu Glu Lys Glu Ser His Pro Thr Pro 11e Asp Pro Pro Ser Ala Arg 130 135 140 Gly Ser Pro Pro Arg Pro Arg Ile Gly Arg Gly Arg Ala Phe Arg Cys 150 155 Gly Trp Ser Leu Ser Leu Gly Phe Gln Leu Ser Gln Leu Leu Leu Thr 165 170 lle Tyr Tyr Val Ser Glu Phe Leu Pro 185 180

<210> 3670

〈211〉 138

<212> PRT

<213> Homo sapiens

<400> 3670

Met Asn Glu Trp Gln Ser Trp Gly Leu Asn Leu Asp Leu Phe Asp Ser

1 5 10 15

lle Leu Leu Arg Thr Gln Leu His Glu Leu Cys Leu lle Lys lle Phe 25 Gly Ala Phe Phe Phe Phe Ala Thr Lys Ser His Ser Val Thr Gln Ala 40 45 Gly Gly Ala Val Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser 50 55 60 Asn Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Thr His 70 75 His His Ala Trp Leu Ile Phe Val Phe Leu Val Glu Ala Gly Phe His 85 90 His Val Gly Glu Ala Ser Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro 105 100 Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His His Thr 120 125 Trp Pro Phe Ser Val 11e Leu Thr Asn Thr 130 135

<210> 3671

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3671

Met Met Trp Asp Phe Lys Lys Tyr Tyr Val Ser Asn Phe Ser Lys Gln
1 5 10 15

Leu Leu Asp Ser 11e Trp His Gln Pro 11e Phe Asn Leu Leu Ser 11e 20 25 30

Gly Gln Ser Leu Tyr Ala Lys Ala Lys Glu Leu Asp Arg Val Lys Glu 35 40 45

lle Gln Glu Gln Leu Phe His 11e Lys Lys Leu Leu Lys Thr Cys Arg
50 55 60

Phe Ala Asn Ser Ala Leu Lys Glu Phe Glu Gln Val Pro Gly His Leu 65 70 75 80

Thr Asp Glu Leu His Leu Phe Ser Leu Glu Asp Leu Val Arg Ile Lys

85

90

Lys Gly Leu Leu Ala Pro Leu Leu Lys Asp Ile Leu Lys Ala Ser Leu 100 105 Ala His Val Ala Gly Cys Glu Leu Cys Gln Gly Lys Gly Phe 11e Cys 120 125 Glu Phe Cys Gln Asn Thr Thr Val lle Phe Pro Phe Gln Thr Ala Thr 130 135 140 Cys Arg Arg Cys Ser Ala Cys Arg Ala Cys Phe His Lys Gln Cys Phe 150 155 Gln Ser Ser Glu Cys Pro Arg Cys Ala Arg Ile Thr Ala Arg Arg Lys 165 170 175 Leu Leu Glu Ser Val Ala Ser Ala Ala Thr 180 185

<210> 3672

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3672

Met Lys Val Ala Leu Leu Arg Phe Phe Ser Pro Pro Asn Met Ser Val

1 5 10 15

Thr His Lys Glu Ala His Glu Arg Lys Cys Pro Glu Lys Pro Glu Leu

20 25 30

Trp Lys Ala Gly Ser Thr Val Pro Leu Thr Ala Pro Glu Lys Thr Asp 35 40 45

Pro Phe Pro Leu Cys Pro Pro Leu Ser Leu Thr Cys Pro Gln Gln Gln 50 55 60

Ser Cys Ile Pro Ser Ser Ser Gln Asp Val Leu Asn Ser Leu Trp Val 65 70 75 80

Ser Ser His Cys Leu Gln Leu Lys Ile Ser Lys Thr Lys Thr His Cys 85 90 95

Leu Pro Thr Gln Asn Val Leu Pro Phe Leu Leu Pro Thr Pro Val Ser 100 105 110

He Val Cys Arg Leu Pro Gly Leu Asp Pro 115 120

<210> 3673 <211> 122 <212> PRT <213> Homo sapiens <400> 3673 Met Pro Val Ile Ala Ala Val Gly His Val Val Leu Trp Trp Met Pro 5 1 10 15 Val Ile Ala Thr Val Gly Cys Val Val Leu Trp Trp Met Leu Val Ile 20 25 Ala Ala Val Gly Arg Val Val Leu Trp Trp Met Pro Val 11e Ala Ala Val Gly Cys Val Val Leu Trp Trp Met Leu Val Ile Ala Thr Val Gly 50 60 Arg Val Val Leu Trp Trp Met Pro Val lle Ala Ala Val Gly His Val 70 75 Val Leu Trp Trp Val Leu lle Gln Phe Arg Thr His Val Ala Leu Gly 90 95 85 Cys Leu Gly Pro Gln His Thr Gly Lys Leu Ile Ile Thr Gly Val Ala 100 105 110 Cys Ser Leu Ser Thr Ala His Pro Gln Leu 120 115 <210> 3674 <211> 108 <212> PRT <213> Homo sapiens <400> 3674

Met Gly Lys Val Arg Thr Ala Cys Pro Ala Gly Gly Trp Gly Cys Ser

Cys His Gln His Trp Ala Leu Ser Leu Gly Leu Arg Leu Ser Asp Arg

25

20

10

<210> 3675

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3675

Met Ala Gly Ala Ala Arg Trp Val Gly Gln Glu Ser Ser Ala Met Val

1 5 10 15

Cys Phe Gly Cys Pro Gly Gly Ala Ser Ser Arg Cys Arg Ser Pro Arg 20 25 30

Gly Arg Gln Ala Ser Arg Val Pro Arg Leu Glu Asn Gly Ala Gln Arg 35 40 45

Val Val Arg Thr Met Val His Leu Val Leu Gln Pro Lys Arg Val Thr 50 55 60

Leu Val His Pro Pro Arg Gly Leu Glu Pro Val Cys Thr Pro 11e Ala 65 70 75 80

Arg Met Arg Pro Lys Ser His Gly Leu Arg Ser Ser Leu Pro Leu Ala 85 90 95

Met Ile Pro Gln Pro Ala Thr Arg Val Ser Arg Pro Gln Ala Leu Trp 100 105 110

Lys Arg Leu Tyr Val Ala Cys Thr 115 120 <210> 3676 <211> 121 <212> PRT <213> Homo sapiens <400> 3676 Met Thr Lys Asp Pro Pro Arg Val Thr Gln Pro Gly Pro Leu Val Arg 10 Gly Pro Glu Cys Leu Gln Cys Pro Cys lle Glu Ala Leu Asn Lys Ala 20 Arg Ser Arg Cys Arg Gly Pro Leu Trp Ile Pro Pro Glu His Leu Pro 40 45 Arg Ile Met Ala Pro Lys Thr Glu Gly Lys Glu Thr Ala Gln Phe Ala 55 60 Lys Arg Gln Asp Leu Ser Thr Arg Val Ala Leu Trp Arg Leu Arg Lys 70 75 80 65 Met Phe Ala Cys Gln Tyr Leu Leu Ser Phe Pro Pro Val Pro Thr Lys 90 Arg Gly His Lys Ser Ser Ala Trp His Trp Arg Val Ser Glu Gly Pro 100 110 Glu Ser Cys Val Ser His Gly Val Leu 115 120 <210> 3677 <211> 290 <212> PRT <213> Homo sapiens <400> 3677 Met Arg Lys Pro Arg Pro Arg Lys Val Lys Tyr Leu Ala Gln Gly His 10 Thr Ala Ser Lys Glu Gly Ala Gly Leu Asp Ser Asn Ala Ser Leu Pro

25

45

Leu Cys Ser Val Cys Gly Gln Pro Ala Pro Phe His 11e Cys Cys Leu

40

20

Pro	Gly	Phe	Leu	Pro	Glu	Ala	Pro	He	Ala	Leu	Arg	Gly	Val	Gln	Ala
	50					55					60				
Asp	Pro	Pro	Val	Leu	Leu	Leu	Gly	Pro	Gly	Glu	Leu	Glu	Lys	Pro	Gly
65					70					75					80
Gly	Gln	Val	Trp	Val	Gly	Ser	Pro	Leu	Pro	Ser	Ser	Arg	Ala	Cys	Pro
				85					90					95	
Pro	Pro	Ala	Cys	Ser	Pro	Leu	Leu	Asn	Pro	Met	Pro	Thr	Phe	Cys	Lys
			100					105					110		
Leu	Trp	Leu	Arg	Lys	Ser	Ser	Ser	Ala	Trp	Leu	Cys	Thr	Glu	Val	Ser
		115					120					125			
Ser	Ala	Trp	Asn	His	Val	Gln	Met	Arg	Cys	Ala	Cys	Ala	His	Val	Glu
	130					135					140				
Trp	Cys	Ser	Lys	Asn	Leu	Tyr	Ser	Ala	Ser	Trp	Lys	Arg	Ser	His	Ser
145					150					155					160
Arg	Arg	Pro	Ala	Gly	Ala	Ala	Arg	Ala	Trp	Glu	Arg	Arg	Pro	Gly	Arg
				165					170					175	
G1 y	Cys	Thr	Pro	Gly	Pro	Gly	Gly	Gly	Arg	Gly	Arg	Ala	Gly	Ala	Glu
			180					185					190		
Pro	Gly	Gly	Ser	Arg	Arg	Ala	Cys	Arg	His	Thr	Gly	Pro	Arg	Gln	Ala
		195					200					205			
Pro	Cys	Gln	Ala	Pro	Gly	Pro	Arg	Leu	Ala	Ser	Pro	Pro	Arg	Arg	Lys
	210					215					220				
Gln	Thr	Gly	Leu	Trp	Leu	Pro	Pro	Ser	Glu	Pro	Thr	Pro	Ser	Leu	Phe
225					230					235					240
Ser	Arg	Pro	Glu	Leu	Leu	He	Pro	Ser	Пe	Ser	Phe	Arg	Pro	Leu	Gly
				245					250					255	
Thr	Tyr	Pro	Arg	Val	Asp	Ala	Leu	Ser	His	Ala	Met	Gly	Ser	Gly	Met
			260					265					270		
G1 y	Trp		Val	Leu	Thr	Leu		Ala	Val	Val	Gly		Pro	His	Val
		275					280					285			
Arg															
	290														

<210> 3678 <211> 117 <212> PRT <213> Homo sapiens <400> 3678 Met Val Gly Pro Ser His Leu Gly Asn Ser Ser Leu Met Gln Ser Val 1 5 10 15 Thr Gln Gln Trp Cys Leu Gly Ala Ser Ala Cys Ile Gly Ala Gly Leu 25 Val Pro Lys Pro Arg Pro Pro Pro Cys Gly Ser Thr Thr Gly Lys Gly 40 45 Asn Asn Gln Thr Ser Ser Val Val Met Arg Ile Gln Glu Asp His 55 Val Asn Ile Gly Ile His Asn Gly Gln Thr Leu Trp Arg Met Pro Val 75 70 lle Pro Ala lle Trp Glu Ala Glu Val Gly Arg Trp Arg Glu Pro Gln 90 85 Asn Leu Lys Pro Ala Trp Ala Thr Trp Gln Asn Gln Ser Leu Leu Lys 100 105 110 Ile Gln Lys Ile Gly 115 <210> 3679 <211> 342 <212> PRT <213> Homo sapiens <400> 3679 Met Leu Pro Leu Glu Pro Cys Arg Arg Pro Asn Phe Glu Leu lle Pro 5 10 15 Leu Leu Asn Ser Val Asp Ser Asp Asn Cys Gly Ser Met Val Pro Ser 20 25 Phe Ala Asp lle Leu Tyr Val Ala Asn Asp Glu Glu Ala Ser Tyr Leu 40 45

Arg Phe Arg Asn Ser Ile Trp Lys Asn Glu Glu Glu Lys Val Glu Ile

60

55

Phe	His	Pro	Leu	Arg	Leu	Val	Arg	Asp	Pro	Leu	Ser	Pro	Ala	Val	Arg
65					70					75					80
Gln	Lys	Glu	Thr	Val	Lys	Asn	Asp	Leu	Pro	Val	Asn	Glu	Ala	Ala	11e
				85					90					95	
Arg	Lys	Пе	Ala	Ala	Leu	Glu	Asn	Glu	Leu	Thr	Phe	Leu	Arg	Ser	Gln
			100					105					110		
11e	Лlа	Ala	He	Val	Glu	Met	Gln	Glu	Leu	Lys	Asn	Ser	Thr	Asn	Ser
		115					120					125			
Ser	Ser	Phe	Gly	Leu	Ser	Asp	Glu	Arg	lle	Ser	Leu	Gly	Gln	Leu	Ser
	130					135					140				
Ser	Ser	Arg	Ala	Ala	His	Leu	Ser	Val	Asp	Pro	Asp	Gln	Leu	Pro	Gly
145					150					155					160
Ser	Val	Leu	Ser	Pro	Pro	Pro	Pro	Pro	Pro	Leu	Pro	Pro	Gln	Phe	Ser
				165					170					175	
Ser	Leu	Gln	Pro	Pro	Cys	Phe	Pro	Pro	Va]	Gln	Pro	Gly	Ser	Asn	Asn
			180					185					190		
He	Cys	Asp	Ser	Asp	Asn	Pro	Ala	Thr	Glu	Met	Ser	Lys	Gln	Asn	Pro
		195					200					205			
Ala	Ala	Asn	Lys	Thr	Asn	Tyr	Ser	His	His	Ser	Lys	Ser	Gln	Arg	Asn
	210					215					220				
	Asp	lle	Pro	Asn		Leu	Asp	Val	Leu		Asp	Met	Asn	Lys	
225					230					235			e .		240
Lys	Leu	Arg	Ala		Glu	Arg	Ser	Pro		Gly	Arg	Pro	lle		Lys
				245			_		250					255	
Arg	Lys	Arg		Asn	Ser	His	Trp		Pro	Val	Ser	Leu		Ser	His
	,	,	260		13.1		ro.i	265	61				270	0.1	
Ala	Leu	Lys	GIn	Lys	Phe	Ala		GIn	Glu	Asp	Asp		Phe	Glu	Lys
6.1		275	c	T.	61	C	280	D	DI	C		285 p	61	TI	
GIu		Arg	Ser	Trp	Glu		Ser	Pro	Phe	Ser		Pro	61u	Ihr	Ser
	290	C 1	11.	11.	7.1	295	C1	C	C1	C1	300	A	TI.	,	Cl
	Pne	Gly	пıs	HIS		Ser	GIn	Ser	GIU		GIN	Arg	inr	Lys	
305	14 - 4	V 1	۸	ть	310	A 1 -	V - 1	Λ	C1	315	31	C	۸ ـ	T1	320
oiu	meı	Val	ASH		LYS	ита	val	ASP		61 y	116	ser	asn		ser
۱ ۵۰۰	Lan	A 6.5	San	325	71.				330					335	
Leu	Leu	Asn		лгg	116										
			340												

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<211> 247
<212> PRT
<213> Homo sapiens
<400> 3680
Met Gly Gln Gly Leu Pro Asp Glu Glu Gln Glu Lys Leu Leu Arg Ile
                 5
 1
Cys Ser Ile Tyr Thr Gln Ser Gly Glu Asn Ser Leu Val Gln Glu Gly
                                 25
Ser Glu Ala Ser Pro Ile Gly Lys Ser Pro Tyr Thr Leu Asp Ser Leu
                             40
                                                 45
Tyr Trp Ser Val Lys Pro Ala Ser Ser Ser Phe Gly Ser Glu Ala Lys
                                             60
    50
                         55
Ala Gln Gln Glu Glu Gln Gly Ser Val Asn Asp Val Lys Glu Glu
                     70
                                         75
Glu Lys Glu Glu Lys Glu Val Leu Pro Asp Gln Val Glu Glu Glu Glu
                                     90
                 85
Glu Asn Asp Asp Glu Glu Glu Glu Glu Glu Asp Glu Asp Glu Asp
                                105
                                                    110
Asp Glu Glu Glu Asp Arg Met Glu Val Gly Pro Phe Ser Thr Gly Gln
                           120
                                                125
Glu Ser Pro Thr Ala Glu Asn Ala Arg Leu Leu Ala Gln Lys Arg Gly
    130
                                            140
                        135
Ala Leu Gln Gly Ser Ala Trp Gln Val Ser Ser Glu Asp Val Arg Trp
                    150
Asp Thr Phe Pro Leu Gly Arg Met Pro Gly Gln Thr Glu Asp Pro Ala
                165
                                    170
                                                         175
Glu Leu Met Leu Glu Asn Tyr Asp Thr Met Tyr Leu Leu Asp Gln Pro
            180
                                185
                                                     190
Val Leu Glu Gln Arg Leu Glu Pro Ser Thr Cys Lys Thr Asp Thr Leu
                            200
                                                205
Gly Leu Ser Cys Gly Val Gly Ser Gly Asn Cys Ser Asn Ser Ser Ser
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<210> 3680

Ser Asn Phe Glu Gly Leu Leu Trp Ser Gln Gly Gln Leu His Gly Leu 225 230 235 240

Lys Thr Gly Leu Gln Leu Phe 245

<210> 3681 <211> 413 <212> PRT

<213> Homo sapiens

<400> 3681

Met Gly Ser Ser Gln Ser Val Glu lle Pro Gly Gly Gly Thr Glu Gly

1 5 10 15

Tyr His Val Leu Arg Val Gln Glu Asn Ser Pro Gly His Arg Ala Gly
20 25 30

Leu Glu Pro Phe Phe Asp Phe 11e Val Ser 11e Asn Gly Ser Arg Leu 35 40 45

Asn Lys Asp Asn Asp Thr Leu Lys Asp Leu Leu Lys Ala Asn Val Glu 50 55 60

Lys Pro Val Lys Met Leu Ile Tyr Ser Ser Lys Thr Leu Glu Leu Arg
65 70 75 80

Glu Thr Ser Val Thr Pro Ser Asn Leu Trp Gly Gly Gln Gly Leu Leu 85 90 95

Gly Val Ser lle Arg Phe Cys Ser Phe Asp Gly Ala Asn Glu Asn Val 100 105 110

Trp His Val Leu Glu Val Glu Ser Asn Ser Pro Ala Ala Leu Ala Gly 115 120 125

Leu Arg Pro His Ser Asp Tyr lle Ile Gly Ala Asp Thr Val Met Asn 130 135 140

Glu Ser Glu Asp Leu Phe Ser Leu Ile Glu Thr His Glu Ala Lys Pro 145 150 155 160

Leu Lys Leu Tyr Val Tyr Asn Thr Asp Thr Asp Asn Cys Arg Glu Val 165 170 175

Ile Ile Thr Pro Asn Ser Ala Trp Gly Gly Glu Gly Ser Leu Gly Cys 180 185 190

Gly	He	Gly	Tyr	Gly	Tyr	Leu	His	Arg	lle	Pro	Thr	Arg	Pro	Phe	Glu
		195					200					205			
Glu	Gly	Lys	Lys	Пe	Ser	Leu	Pro	Gly	Gln	Met	Ala	Gly	Thr	Pro	He
	210					215					220				
Thr	Pro	Leu	Lys	Asp	Gly	Phe	Thr	Glu	Val	Gln	Leu	Ser	Ser	Val	Λsn
225					230					235					240
Pro	Pro	Ser	Leu	Ser	Pro	Pro	Gly	Thr	Thr	Gly	He	Glu	Gln	Ser	Leu
				245					250					255	
Thr	Gly	Leu	Ser	Ile	Ser	Ser	Thr	Pro	Pro	Λla	Val	Ser	Ser	Val	Leu
			260					265					270		
Ser	Thr	Gly	Val	Pro	Thr	Val	Pro	Leu	Leu	Pro	Pro	Gln	Val	Asn	Gln
		275					280					285			
Ser	Leu	Thr	Ser	Val	Pro	Pro	Met	Asn	Pro	Ala	Thr	Thr	Leu	Pro	Gly
	290					295					300				
Leu	Met	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Asn	Leu	Pro	Asn	Leu	Asn	Leu
305					310					315					320
Asn	Leu	Pro	Ala	Pro	His	He	Met	Pro	Gly	Val	Gly	Leu	Pro	Glu	Leu
				325					330					335	
Val	Asn	Pro	Gly	Leu	Pro	Pro	Leu	Pro	Ser	Met	Pro	Pro	Arg	Asn	Leu
			340					345					350		
Pro	Gly	lle	Λla	Pro	Leu	Pro	Leu	Pro	Ser	Glu	Phe	Leu	Pro	Ser	Phe
		355					360					365			
Pro	Leu	Val	Pro	Glu	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Gly	Glu	Leu	Leu
	370					375					380				
Ser	Ser	Leu	Pro	Pro	Thr	Ser	Asn	Ala	Pro	Ser	Asp	Pro	Ala	Thr	Thr
385					390					395					400
Thr	Ala	Lys	Ala	Asp	Ala	Ala	Ser	Ser	Ser	Leu	Trp	Met			
				405					410						

<210> 3682

⟨211⟩ 425

<212> PRT

<213> Homo sapiens

<400> 3682

Met	Arg	Ser	Leu	Asp	Phe	Gly	Met	Arg	Thr	Gln	Val	Thr	Arg	Glu	Ala
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He	Ser	Arg	Leu	Cys	Glu	Ala	Val	Pro	Gly	Ala	Asn	Gly	Ala	Пe	Lys
			20					25					30		
Lys	Arg	Lys	Pro	Pro	Val	Lys	Phe	Leu	Ser	Thr	Val	Leu	Gly	Lys	Ser
		35					40					45			
Asn	Leu	Gln	Phe	Ser	Gly	Met	Asn	lle	Lys	Leu	Thr	11e	Ser	Thr	Cys
	50					55					60				
Ser	Leu	Thr	Leu	Met	Asn	Leu	Asp	Asn	Gln	Gln	Ile	He	Ala	Asn	His
65					70					75					80
His	Met	Gln	Ser	lle	Ser	Phe	Ala	Ser	Gly	Gly	Asp	Pro	Asp	Thr	Thr
				85					90					95	
Asp	Tyr	Va]	Ala	Tyr	Val	Ala	Lys	Asp	Pro	Val	Asn	Gln	Arg	Ala	Cys
			100					105					110		
His	lle	Leu	Glu	Cys	His	Asn	Gly	Met	Ala	Gln	Asp	Val	He	Ser	Thr
		115					120					125			
He	Gly	Gln	Ala	Phe	Glu	Leu	Arg	Phe	Lys	Gln	Tyr	Leu	Lys	Asn	Pro
	130					135					140				
Ser	Leu	Asn	Thr	Ser	Cys	Glu	Ser	Glu	Glu	Val	His	He	Asp	Ser	His
145					150					155					160
Ala	Glu	Glu	Arg		Asp	His	Glu	Tyr		Asn	Glu	lle	Pro	Gly	Lys
				165					170					175	
Gln	Pro	Pro		Gly	Gly	Val	Ser		Met	Arg	He	Lys		Gln	Ala
			180		_	_		185					190	_	_
Thr	Glu		Met	Ala	Tyr	Cys						Lys		Cys	Tyr
		195										205			
Leu		Gly	Asn	Ser	Lys		Ser	Ser	Val	Tyr		Asn	Cys	Leu	Glu
0.1	210					215			15		220		0.1		
	Ser	Arg	Ala	He		Asn	Val	HIS	Pro		61 y	Val	GIn	Ser	
225	Α	TI.	C .		230	1	n.	TI	C	235	W. 1	4 .	1	DI	240
Arg	Asp	Inr	Ser		Leu	Lys	HIS	lhr		Arg	vai	Asp	Leu		Asp
Δ	D	C	т	245	Α	T1	C1	A 71	250	C1	C	ть -	D	255	C
nsp	rro	CY\$		116	Asn	ınr	oin		Leu	oin	ser	Thr		оту	ser
Δla	Clv	Acr	260 Glp	Δκα	Sor	Δ1c	Gl _p	265 Pro	Lou	Clu	Sor	Pro	270 Trp	Ніс	Cvc
11 11	1111	77.511	11111	MIN	. 31-11	11 11	1111	E (20)	1 (-2 1	11 I V	3 P 1	E (()	1 (()	111	1.00

		275					280					285			
Gly	Lys	Ala	Pro	Glu	Thr	Val	Gln	Pro	Gly	Ala	Thr	Ala	Gln	Pro	Ala
	290					295					300				
Ser	Ser	His	Ser	Leu	Pro	His	lle	Lys	Gln	Gln	Leu	Trp	Ser	Glu	Glu
305					310					315					320
Cys	Tyr	His	Gly	Lys	Leu	Ser	Arg	Lys	Ala	Ala	Glu	Ser	Leu	Leu	Val
				325					330					335	
Lys	Asp	Gly	Asp	Phe	Leu	Val	Arg	Glu	Ser	Ala	Thr	Ser	Pro	Gly	Gln
			340					345					350		
Tyr	Val	Leu	Ser	Gly	Leu	Gln	Gly	Gly	Gln	Ala	Lys	His	Leu	Leu	Leu
		355					360					365			
Val	Asp	Pro	Glu	Gly	Lys	Val	Arg	Thr	Lys	Asp	His	Val	Phe	Asp	Asn
	370					375					380				
Val	Gly	His	Leu	He	Arg	Tyr	His	Met	Asp	Asn	Ser	Leu	Pro	Пе	He
385					390					395					400
Ser	Ser	Gly	Ser	Glu	Val	Ser	Leu	Lys	Gln	Pro	Val	Arg	Lys	Asp	Asn
				405					410					415	
Asn	Pro	Ala	Leu	Leu	His	Ser	Asn	Lys							
			420					425							

<210> 3683

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3683

 Met
 Asp
 Gly
 Leu
 Lys
 Val
 Gly
 His
 Asp
 Pro
 Ala
 Lys
 Glu
 Phe
 Thr
 Asn

 1
 5
 10
 10
 15
 15

 His
 Trp
 Trp
 Asn
 Glu
 Leu
 Phe
 Asn
 Lys
 Thr
 Ala
 Ala
 Asn
 Leu
 Val
 Val

 Glu
 Thr
 Ala
 Ala
 Asn
 Leu
 Val
 Val
 Val

 Glu
 Thr
 Ala
 Ala
 Asn
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 Val

 Glu
 Thr
 Ala
 Ala
 Ala
 Asn
 Leu
 Val
 Val
 Val

 Glu
 Thr
 Ala
 Ala
 Asn
 Leu
 Ser
 Leu
 Ser
 Leu
 Leu

Lys Val Leu Glu Ala Val Gly Asn Arg Val His Pro Phe Ser Leu Pro

<210> 3684

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3684

Met Ala Lys Arg Leu Gln Ala Glu Leu Ser Cys Pro Val Cys Leu Asp

1 5 10 15

Phe Phe Ser Cys Ser Ile Ser Leu Ser Cys Thr His Val Phe Cys Phe

20 25 30

Asp Cys Ile Gln Arg Tyr lle Leu Glu Asn His Asp Phe Arg Ala Met
35 40 45

Cys Pro Leu Cys Arg Asp Val Val Lys Val Pro Ala Leu Glu Glu Trp 50 55 60

Gln Val Ser Val Leu Thr Leu Met Thr Lys Gln IIis Asn Ser Arg Leu 65 70 75 80

Glu Gln Ser Leu His Val Arg Glu Glu Leu Arg His Phe Arg Glu Asp 85 90 95

Val Thr Leu Asp Ala Ala Thr Ala Ser Ser Leu Leu Val Phe Ser Asn 100 105 110

Asp Leu Arg Ser Ala Gln Cys Lys Lys lle His His Asp Leu Thr Lys
115 120 125

Asp Pro Arg Leu Ala Cys Val Leu Gly Thr Pro Cys Phe Ser Ser Gly 130 135 140

Gln His Tyr Trp Glu Val Glu Val Gly Glu Val Lys Ser Trp Ser Leu

Gly Val Cys Lys Glu Pro Ala Asp Arg Lys Ser Asn Asp Leu Phe Pro Gly His Gly Phe Trp Ile Ser Met Lys Ala Gly Ala Ile His Ala Asn Thr His Leu Glu Arg lle Pro Ala Ser Pro Arg Leu Arg Arg Val Gly lle Phe Leu Asp Ala Asp Leu Glu Glu Ile Gln Phe Phe Asp Val Asp Asn Asn Val Leu Ile Tyr Thr His Asp Gly Phe Phe Ser Leu Glu Leu Leu Cys Pro Phe Phe Cys Leu Glu Leu Leu Gly Glu Gly Glu Ser Gly Asn Val Leu Thr Ile Cys Pro

<210> 3685

<211> 194

<212> PRT

<213> Homo sapiens

<400> 3685

Met Asp Trp Gly Gly Gly Ser Thr Leu Thr Pro Ala Gly Ala Ser Ala Gln Glu Pro Arg Leu Ala Gln Pro Ser Leu Gly Arg Pro Ile Pro Arg Val Pro His Pro Val Ser Val Ser Thr Asp Gln Gly Leu Pro Asp Thr Cys Ser Gly Val Ala Met Gly Thr Ser Gly Arg Val Ser Val Ala His Thr Ala Val Cys Arg His Thr Glu Gly Met His Ala Cys Val Cys Ala His Leu His Val Phe Thr Arg Thr Gly His Arg Arg Arg Cys Ser His

Ser Gly Val His Arg Pro Leu Cys Arg Cys Ala His Thr Gln Gly

100 105 110 Tyr Val His Arg Arg Val Cys Val Leu Ala Pro Gly Gly Ser Arg 120 Pro Thr Pro His Ile Val Tyr Ser Val Pro Ala Ala Arg Thr Cys Leu 130 135 Gly Ala Pro Gly Ser Leu Ser Pro Cys His Leu Cys Val His Ile Cys 150 155 Ala His Thr Tyr Ser Gly Thr Pro Val Cys Val His Gly Cys Pro Gly 165 170 Thr Leu Gly Ser Pro Ser Pro Arg Leu Pro Arg Leu Leu Glu Ser Gly 190 180 185 Thr Phe

<210> 3686

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3686

Met Arg Ser Phe Leu Leu Val Trp Lys Leu Phe Arg Arg Lys Asp Met 10 Lys His Gln Arg Lys Thr Ala Thr Glu Phe Lys Thr Thr Glu Glu Gly 20 25 Glu Thr Arg Gln Asp Gly Lys Asp Gly Ser Leu Thr Tyr Arg Ala Asp 40 Thr Cys Ser Pro Cys Pro Glu Ala Gly Gly Pro Pro Ser Ser Ser Ile 55 60 Ala Ser Gly Ser Ser lle Ser Val Gly Asn Ser Pro Ser His Ser His 70 75 80 65 Ser His Thr Ser Arg Arg Cys Gly Gly Ser Ser Arg Ser Arg Glu Cys Cys Ser Ser Leu His Ser Ser Arg Gly Ser Arg Gly Ser Ser Trp Ser 100 105 110

Ser Ser Pro Pro Gly Ser Thr Cys Arg Trp Cys Ser Cys His Ser His

His His Ser His His Arg Ser His His Arg Ser His His Cys Ser His His His Ser His His Ser Gly His His Ser His His Asn Phe His Asn His Ser Asn Pro Trp Cys Gln <210> 3687 <211> 188 <212> PRT <213> Homo sapiens <400> 3687 Met Leu Val Met Glu Asp Gln His Asn Ser Glu 11e Glu Ser Leu Gln Lys Ala Leu Gly Val Ala Arg Glu Asp Asn Arg Lys Leu Ala Met Ser Leu Glu Gln Ala Leu Gln Thr Asn Asn His Leu Gln Thr Lys Leu Asp His Ile Gln Glu Gln Leu Glu Ser Lys Glu Leu Glu Arg Gln Asn Leu Glu Thr Phe Lys Asp Arg Met Thr Glu Glu Ser Lys Val Glu Ala Glu Leu His Ala Glu Arg 11e Glu Ala Leu Arg Lys Gln Phe Gln Thr Glu Arg Glu Thr Thr Lys Lys Val Ala Gln Arg Glu Val Ala Glu Leu Lys Lys Ala Leu Asp Glu Ala Asn Phe Arg Ser Val Glu Val Ser Arg Thr Asn Arg Glu Leu Arg Gln Lys Leu Ala Glu Leu Glu Lys lle Leu Glu Ser Asn Lys Glu Lys 11e Lys Asn Gln Lys Thr Gln 11e Lys Leu His

Leu Ser Ala Lys Ala Asn Asn Ala Gln Asn Ile Glu Arg Met Lys Val

Val Trp Glu Thr Ser Ser His Phe Leu Asp Thr Leu
180 185

<210> 3688

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3688

Met Thr Cys Trp Glu Gly Asn Cys His Val Cys Ser Ser Pro Gly Gly

1 5 10 15 ...

Ser Asp Val Phe Leu Ile Ile Leu Gl
n Val Pro Lys Ala His Pro Cys $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Leu Trp Gly His 11e Thr Ser His Val Thr Leu Cys Ser Phe Gly Thr 35 40 45

Met Ser Leu Trp Thr Val Trp Leu 11e Val Val Val Gln Gly Gln Val
50 55 60

Met Cys His Pro Ser Leu Lys Cys Leu His Pro Val Asn Cys Leu Ala 65 70 75 80

Tyr Phe Pro Leu Thr Pro Gly Ser Gly Pro Ser Ser Leu Leu Ser Pro
85 90 95

Tyr Leu Ser Pro His Ile Gln Ser Pro Pro Lys Ile Leu Pro Val Leu 100 105 110

Leu Leu Cys Pro Phe Glu Arg Ala Gln Ser Phe Ile Leu 115 120 125

<210> 3689

⟨211⟩ 343

<212> PRT

<213> Homo sapiens

<400> 3689

Met His His Thr Arg Glu Ser Lys Asp Gly Glu Pro Ser Pro Arg Ser

1				5					10					15	
Ala	Ala	His	Thr	Met	Pro	Arg	Arg	Lys	Lys	Gly	Tyr	Cys	Glu	Cys	Cys
			20					25					30		
Gln	Glu	Ala	Phe	Glu	Glu	Leu	His	Val	His	Leu	Gln	Ser	Ala	Gln	His
		35					40					45			
Arg	Ser	Phe	Ala	Leu	Glu	Ala	His	Leu	Tyr	Ala	Glu	Val	Asp	Arg	11e
	50					55					60				
lle	Ala	Gln	Leu	Ser	His	Ser	Phe	Ala	Asp	lle	Pro	Phe	Gln	Ala	G1 y
65					70					75					80
Leu	Pro	Arg	Trp	Ser	Gly	Ser	Pro	Ala	Ser	Asp	Cys	Asp	Pro	Leu	Cys
				85					90					95	
Pro	Glu	Thr	Leu	His	Pro	His	Gln	Pro	Ser	His	Pro	Arg	Ala	Ala	Ser
			100					105					110		
Pro	Arg	He	Arg	Lys	Glu	Asp	Ser	Cys	Gln	Ala	Ser	Va]	Thr	Gln	Gly
		115					120					125			
Arg	Ala	Ala	G1 y	Gln	Gln	Arg	Trp	Thr	Glu	Ser	Leu	Asp	Gly	Val	Met
	130					135					140				
Gly	Pro	Pro	Ala	Ser	His	Thr	Cys	Val	Ser	Ala	Thr	Thr	Leu	Leu	Pro
145					150					155					160
Ala	Leu	Pro	Lys		Ser	Arg	Glu	Gln		Cys	Leu	Cys	Pro		Pro
				165					170					175	
Ala	Ser	Phe		GIn	Ser	His	Leu		Thr	Ser	Leu	Ala		Leu	Pro
0.1			180					185					190		
Gly	Glu		Ser	Pro	Ala	Glu		Met	Pro	Leu	HIS		Ser	GIn	61u
	C	195		D	4.1		200	n	17 1	,	C1	205			131
Asn	0 - 0	Phe	Ala	Pro	Ala		11e	Pro	val	Lys		Pro	Leu	Leu	Phe
Dave	210	41.	A	Dava	т	215	Mad	C	41 -	A	220	т	V a I	A	Dana
225	GIU	мла	AIG	L10	Trp 230	Leu	Met	ser	иза	A1 g	Cys	пр	vai	AIG	240
	Pro	Pho	Val	The	Trp	Clv	Cvc	Lou	110		Ніс	Acn	The	The	
THE	110	1116	vai	245	пр	GTY	Cys	Leu	250	110	111.5	лър	1111	255	110
Len	His	Glu	Glu		Ser	Pro	Cvs	Pro		Leu	Ara	Leu	Glv		Leu
1,00	1113	Old	260	, a,	501	110	O, 3	265	Cy 3	LCu	.11. 5	1.0 0	270	1 9 1	1,00
Tvr	Leu	Leu		Thr	Gln	Ser] eu		Cvs	Arø	Val	Arø		Pro	Ser
- , -		275				~~1	280	15	-,0	0	1	285			., 01
Leu	Ser		Ala	GLv	Pro	116		Ara	Thr	Sor	Hic		Cve	Tha	Lau

Ala Phe Pro Ser Tyr Leu Asn Asp His Asp Leu Gly His Leu Cys Gln Ala Lys Pro Gln Gly Trp Asn Thr Pro Gln Pro Phe Leu His Cys Gly Phe Leu Ala Val Asp Ser Gly <210> 3690 <211> 333 <212> PRT <213> Homo sapiens <400> 3690 Met Cys Arg Gly Gly Arg Met Phe Ala Pro Thr Lys Thr Trp Arg Arg Trp His Arg Arg Val Asn Thr Thr Gln Lys Arg Tyr Ala Ile Cys Ser Ala Leu Ala Ala Ser Ala Leu Pro Ala Leu Val Met Ser Lys Gly His Arg Ile Glu Glu Val Pro Glu Leu Pro Leu Val Val Glu Asp Lys Val Glu Gly Tyr Lys Lys Thr Lys Glu Ala Val Leu Leu Leu Lys Lys Leu Lys Ala Trp Asn Asp lle Lys Lys Val Tyr Ala Ser Gln Arg Met Arg Ala Gly Lys Gly Lys Met Arg Asn Arg Arg Arg lle Gln Arg Arg Gly Pro Cys lle Ile Tyr Asn Glu Asp Asn Gly Ile lle Lys Ala Phe Arg Asn lle Pro Gly lle Thr Leu Leu Asn Val Ser Lys Leu Asn lle Leu Lys Leu Ala Pro Gly Gly His Val Gly Arg Phe Cys lle Trp Thr Glu

Ser Ala Phe Arg Lys Leu Asp Glu Leu Tyr Gly Thr Trp Arg Lys Ala

				165					170					175	
Ala	Ser	Leu	Lys	Ser	Λsn	Tyr	Asn	Leu	Pro	Met	His	Lys	Met	Πe	Asn
			180					185					190		
Thr	Asp	Leu	Ser	Arg	lle	Leu	Lys	Ser	Pro	Glu	He	Gln	Arg	Λla	Leu
		195					200					205			
Arg	Ala	Pro	Arg	Lys	Lys	He	His	Arg	Arg	Val	Leu	Lys	Lys	Asn	Pro
	210					215					220				
Leu	Lys	Asn	Leu	Arg	lle	Met	Leu	Lys	Leu	Asn	Pro	Tyr	Ala	Lys	Thr
225					230					235					240
Met	Arg	Arg	Asn	Thr	Ile	Leu	Arg	Gln	Ala	Arg	Asn	His	Lys	Leu	Arg
				245					250					255	
Val	Asp	Lys	Ala	Leu	Gln	Ala	Lys	Ser	Asp						
			260					265					270		
Glu	Lys	Ala	Ala	Val	Ala	Gly	Lys	Lys	Pro	Val	Val	Gly	Lys	Lys	Gly
		275					280					285			
Lys	Lys	Ala	Ala	Val	Gly	Val	Lys	Lys	Gln	Lys	Lys	Pro	Leu	Val	Gly
	290					295					300				
Lys	Lys	Ala	Ala	Ala	Thr	Lys	Lys	Pro	Ala	Pro	Glu	Lys	Lys	Pro	Ala
305					310					315					320
Glu	Lys	Lys	Pro	Thr	Thr	Glu	Glu	Lys	Lys	Pro	Ala	Ala			
				325					330						

<210> 3691

<211> 364

<212> PRT

 $\langle 213 \rangle$ Homo sapiens

<400> 3691

	50					55					60				
Gly	Pro	Ser	Gln	Gln	Pro	Лѕр	Pro	Pro	Trp	Ala	Ala	Pro	His	Val	Val
65					70					75					80
Gly	Ser	Asp	Asp	Leu	Lys	Glu	Pro	Gly	Pro	Trp	Gly	Lys	Ala	Cys	Ser
				85					90					95	
Leu	Pro	Met	Trp	Ser	Thr	Gly	Pro	Glu	Ala	Arg	Asp	Gly	Asp	Ser	Ser
			100					105					110	•	
Val	Ser	Ser	Gly	Arg	Leu	Ser	Cys	Ser	Ser	Gly	Gly	His	Asp	Val	Cys
		115					120					125			
Val	Ser	Trp	Lys	Glu	Arg	Pro	Pro	Gln	Val	Leu	Gly	Pro	Gln	Gln	Arg
	130					135					140				
Pro	Arg	Lys	Ser	Asp	Ala	Arg	Leu	Glu	Gln	Leu	Arg	Asp	Lys	11e	Arg
145					150					155					160
Ala	Gln	Ala	Trp	Gln	Gln	Gly	Ser	Cys	Ala	Ser	Leu	Gly	Thr	Ser	Ala
				165					170					175	
Pro	Ser	Ser	Ala	Ser	Arg	Leu	His	Lys	Ala	Ser	Met	Leu	Thr	Leu	Arg
			180					185					190		
Arg	Lys	Gly	Gln	Glu	Ala	Lys	Asn	Pro	Pro	Pro	Ala	Pro	Glu	Cys	Ser
	٠	195					200					205			
Gly	Phe	Ser	Ile	Leu	Ser	Ala	Ala	Glu	Arg	Arg	Val	Glu	Ala	Lys	Ala
	210					215					220				
Ser	His	Gly	Gln	G1 y	Arg	Glu	Leu	Ser	Arg	Val	Ser	Gln	His	Gln	Va]
225					230					235					240
Pro	Val	Leu	Arg	Glu	Lys	Pro	Lys	Arg	Val	Lys	Ser	Ser	Ser	Cys	Lys
				245					250					255	
Arg	Glu	Lys	Thr	Pro	Lys	Leu	Pro	Ser	Pro	Arg	Arg	Ala	Ala	Lys	Asp
			260					265					270		
Lys	His	Lys	Asp	Glu	Gly	Trp	Gln	Ser	Cys	Ser	His	Phe	Val	Asp	Glu
		275					280					285			
Ala	Thr	Glu	Val	His	Arg	Val	Ser	Thr	Ala	Cys		Gly	Leu	His	Arg
	290					295					300				
Gly	Arg	Ala	Ser	His		Ser	Ser	Pro	Arg		Va]	Leu	Leu	Thr	
305					310					315					320
Lys	Pro	Ser	Arg		His	Leu	Gly	Pro		Leu	Gly	Ser	Leu		Arg
		_		325					330					335	_
Pro	Pro	Sor	Ανσ	Ara	$G L_V$	Pho	Trn	Glv	Hic	Ara	Thr	Thr	Ala	Pho	Trn

340 345 350 Arg His Gln Gln Glu Pro Pro Gly Gly Val Asn Ala 355 360

<210> 3692

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3692

Met Trp Lys Gly Phe 11e Leu Thr Val Val Glu Leu Arg Val Pro Thr
1 5 10 15

Asp Leu Thr Leu Leu Pro Gly His Leu Tyr Met Met Ser Glu Val Leu 20 25 30

Ala Lys Glu Glu Ala Arg Arg Ala Leu Glu Thr Pro Ser Cys Phe Leu
35 40 45

Lys Val Ser Arg Leu Glu Ala Gln Leu Leu Glu Arg Tyr Pro Glu
50 55 60

Cys Gly Asn Leu Leu Leu Arg Pro Ser Gly Asp Gly Ala Asp Gly Val 65 70 75 80

Ser Val Thr Thr Arg Gln Met His Asn Gly Thr His Val Val Arg His
85 90 95

Tyr Lys Val Lys Arg Glu Gly Pro Lys Tyr Val lle Asp Val Glu Gln 100 105 110

Pro Phe Ser Cys Thr Ser Leu Asp Ala Val Val Asn Tyr Phe Val Ser 115 120 125

His Thr Lys Lys Ala Leu Val Pro Phe Leu Leu Asp Glu Asp Tyr Glu 130 135 140

Lys Val Leu Gly Tyr Val Glu Ala Asp Lys Glu Asn Gly Glu Asn Val 145 150 155 160

Trp Val Ala Pro Ser Ala Pro Gly Pro Gly Pro Ala Pro Cys Thr Gly
165 170 175

Gly Pro Lys Pro Leu Ser Pro Ala Ser Ser Gln Asp Lys Leu Pro Pro 180 185 190

Leu Pro Pro Leu Pro Asn Gln Glu Glu Asn Tyr Val Thr Pro Ile Gly

200 195 205 Asp Gly Pro Ala Val Asp Tyr Glu Asn Gln Asp Val Ala Ser Ser Ser 215 Trp Pro Val Ile Leu Lys Pro Lys Lys Leu Pro Lys Pro Pro Ala Lys 225 230 235 240 Leu Pro Lys Pro Pro Val Gly Pro Lys Pro Glu Lys Gly Phe His His 245 250 Val Ala Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro Thr 260 265 270 Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His His Thr Trp 280 275 285 Pro His Leu Ser Ser Leu Pro Glu Pro Lys Val Phe Asn Gly Gly Leu 295 300 Glv Arg Lys Leu Pro Val Ser Ser Ala Gln Pro Leu Phe Pro Thr Ala 305 310 315 320 Gly Leu Ala Asp Met Thr Ala Glu Leu Gln Lys Lys Leu Glu Lys Arg 325 330 335 Arg Ala Leu Glu His 340

<210> 3693

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3693

Met Trp Leu Val Glu Cys Thr Gly Arg Asp Leu Thr Gly Leu Ser Cys
1 5 10 15

Leu Leu Gly Met Asp Arg Gln Pro Arg Arg Arg Gln His Val Ala Gly
20 25 30

Cys Arg Asp Val Pro Pro Pro Leu Pro Gln Gly Ser Trp Gly Gln Thr
35 40 45

Ser Pro Arg His Ser Ile Leu Cys Ser Lys Ser Gly Cys Asp Leu Leu 50 55 60

Gly Gly Glu Tyr Asn Gly Glu Thr Ser Gly Glu Glu Phe Leu Ala

Pro Ala Trp Thr Cys Arg Ala Gln Gln Ala Ala Thr Trp Leu Ser Val Gln Gln Thr Ser His Lys Ala Leu Gly Pro Ala Gly Gly Ala Ala Met Ser Ser Lys Leu Ser Pro Glu Glu Gln Phe Leu Ser Arg Ile His Phe Leu Arg Thr Phe Met Cys Ser Val Ala Gly Ala Glu Leu Pro Gly Ile Pro Gln Ala Thr Glu Asn Gly Glu Gly Cys Arg Pro Ala Arg Asp Pro Ala Ser Ser Pro Ser Ser Leu Ser Met Ala Ser Val Cys Thr Gln Cys Ser Ser Ala Gln Leu Val Ser Ala Leu Ser

<210> 3694

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3694

Met Lys Thr His Ser Leu Thr 11e Thr Arg Thr Ala Ser Arg Gly Gly Ala Asn Pro Phe Val Arg Ser Cys Pro His Asp Pro 11e Thr Ser His His Ala Leu Pro Pro Thr Leu Gly Ile Ile Ile Glu His Glu Met Trp Met Gly Thr Gln 11e Gln Thr Tle Ser Lys Cys Val Val Phe Phe Phe Leu Gly Leu Phe Ala Phe Leu Asp Arg Val Val Ser Phe Cys Phe Phe Arg Leu Glu Cys 11e Gly Ala 11e Val Ala Gln Leu Gln Pro Pro Thr

Pro Gly Leu Lys Gln Ser Ser Gly Leu Arg Leu Tyr Phe Leu Cys Asp

Trp Gln Asp Met Tyr Leu <210> 3695 <211> 162 <212> PRT <213> Homo sapiens <400> 3695 Met Ala Val Gly 11e Leu Thr Gln Thr Val Gly Pro Trp Pro Arg Leu Val Ala Tyr Leu Ser Lys Gln Leu Asp Gly Val Phe Lys Asp Trp Pro Pro Cys Leu Arg Ala Leu Ala Ala Thr Ala Leu Leu Ala Gln Glu Val Asp Lys Leu Thr Leu Gly Gln Asn Leu Asn Ile Lys Ala Ser His Ala Val Val Thr Leu Met Asn Thr Lys Gly His His Trp Leu Met Asn Ala Arg Leu Thr Arg Tyr Gln Asn Leu Leu Cys Glu Lys Pro Cys Ile Thr lle Glu Val Cys Asn Thr Leu Asn Pro Ala Thr Leu Leu Pro Val Pro Glu Ser Pro Val Glu Gln Asn Cys Val Glu Val Leu Asp Thr Val Tyr Ser Ser Arg Leu Asp Leu Gln Asp His Thr Trp Ala Ser Val Asp Trp Glu Leu Tyr Val Asp Arg Ser Ser Phe Val Asn Pro Gln Gly Glu Arg

Cys Ala

<210> 3696 <211> 140 <212> PRT <213> Homo sapiens ⟨400⟩ 3696 Met Gln Gln Asp Pro Glu Leu Pro Ser Val Thr Arg Phe Cys Leu Pro 10 Leu Cys Ala Arg Cys Tyr Val Gln Pro Gln Trp Val Phe Asp Ser Val 20 30 Asn Ala Arg Leu Leu Pro Val Ala Glu Tyr Phe Ser Gly Val Gln 40 45 Leu Pro Pro His Leu Ser Pro Phe Val Thr Glu Lys Glu Gly Asp Tyr 55 60 Val Pro Pro Glu Lys Leu Lys Leu Leu Ala Leu Gln Arg Gly Glu Asp 65 70 75 80 Pro Gly Glu Arg Asp Gly Thr Gly Leu Ala Leu Thr Pro Gly Pro Thr 90 Leu Ala Val Ser Leu Ser Cys Gln Gly Gly Lys Leu Gln Gly Thr Gly 100 105 110 Ser Arg Ser Arg Lys Pro Phe Glu Val Thr Cys Arg Ile Arg Leu Arg 120 125 Arg Arg Asp Ile Tyr Leu Leu Gly Ser Gly Val Ile 130 135 140 <210> 3697 <211> 128 <212> PRT <213> Homo sapiens <400> 3697 Met His Ser Arg His Leu Lys 11e Leu Ser His His Cys Cys Pro Val

Thr Thr Leu His Val Asn Ala Ser Leu Ser Leu Glu Leu Ser Leu Ser

25

30

Tyr Ser Gln Leu Pro Pro Pro Asn Thr Phe Arg Ala Gln Val Phe Ser Val Thr Leu Ala Ser Leu Pro Cys Leu Leu Leu Leu Cys Lys Ser Asn Ser Pro Leu Cys Pro Val Leu Phe Ser Ser Leu Leu His Ser 11e Pro Arg Leu Pro Gln Asp Arg Val Ala Ser Ala Leu Asn Glu Phe Phe Ser Pro Gly Leu Gln Gly Pro Gln Arg Ser Ser Ser Tyr Tyr Phe Met Asp Cys Met Asn Ser Thr His Leu Val Thr Ser Trp Gln Val Val Trp Arg

<210> 3698

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3698

Met Gly Asn Val Met Glu Gly Lys Ser Val Glu Glu Leu Ser Ser Thr Glu Cys His Gln Trp Tyr Lys Lys Phe Met Thr Glu Cys Pro Ser Gly Gln Leu Thr Leu Tyr Glu Phe Arg Gln Phe Phe Gly Leu Lys Asn Leu Ser Pro Ser Ala Ser Gln Tvr Val Glu Gln Met Phe Glu Thr Phe Asp Phe Asn Lys Asp Gly Tyr Ile Asp Phe Met Glu Tyr Val Ala Ala Leu Ser Leu Val Leu Lys Gly Lys Val Glu Gln Lys Leu Arg Trp Tyr Phe Lys Leu Tyr Asp Val Asp Gly Asn Gly Cys Ile Asp Arg Asp Glu Leu Leu Thr Ile Ile Gln Ala Ile Arg Ala Ile Asn Pro Cys Ser Asp Thr

Thr Met Thr Ala Glu Glu Phe Thr Asp Thr Val Phe Ser Lys Ile Asp 135 140 Val Asn Gly Asp Gly Glu Leu Ser Leu Glu Glu Phe Ile Glu Gly Val 145 150 155 160 Gln Lys Asp Gln Met Leu Leu Asp Thr Leu Thr Arg Ser Leu Asp Leu 165 170 175 Thr Arg Ile Val Arg Arg Leu Gln Asn Gly Glu Gln Asp Glu Gly Gly 180 185 190 Ala Asp Glu Ala Ala Glu Ala Ala Gly 200 195

<210> 3699

<211> 1394

<212> PRT

<213> Homo sapiens

<400> 3699

Met Ala Ala Leu Leu Arg Ser Ala Arg Trp Leu Leu Arg Ala Gly Ala 1 5 10 15

Ala Pro Arg Leu Pro Leu Ser Leu Arg Leu Leu Pro Gly Gly Pro Gly
20 25 30

Arg Leu His Ala Ala Ser Tyr Leu Pro Ala Ala Arg Ala Gly Pro Val 35 40 45

Ala Gly Gly Leu Leu Ser Pro Ala Arg Leu Tyr Ala lle Ala Ala Lys 50 55 60

Glu Lys Asp Ile Gln Glu Glu Ser Thr Phe Ser Ser Arg Lys Ile Ser
65 , 70 75 80

Asn Gln Phe Asp Trp Ala Leu Met Arg Leu Asp Leu Ser Val Arg Arg 85 90 95

Thr Gly Arg Ile Pro Lys Lys Leu Leu Gln Lys Val Phe Asn Asp Thr
100 105 110

Cys Arg Ser Gly Gly Leu Gly Gly Ser His Ala Leu Leu Leu Leu Arg 115 120 125

Ser Cys Gly Ser Leu Leu Pro Glu Leu Lys Leu Glu Glu Arg Thr Glu 130 135 140

Phe	Ala	llis	Arg	11e	Trp	Asp	Ihr	Leu	GIn	Lys	Leu	Gly	Ala	Val	Tyr
145					150					155					160
Asp	Val	Ser	His	Tyr	Asn	Ala	Leu	Leu	Lys	Val	Tyr	Leu	Gln	Asn	Glu
				165					170					175	
Tyr	Lys	Phe	Ser	Pro	Thr	Asp	Phe	Leu	Ala	Lys	Met	Glu	Glu	Ala	Asn
			180					185					190		
He	Gln	Pro	Asn	Arg	Val	Thr	Tyr	Gln	Arg	Leu	lle	Ala	Ser	Tyr	Cys
		195					200					205			
Asn	Val	Gly	Asp	lle	Glu	Gly	Ala	Ser	Lys	Ile	Leu	Gly	Phe	Met	Lys
	210					215					220				
Thr	Lys	Asp	Leu	Pro	Val	Thr	Glu	Ala	Val	Phe	Ser	Ala	Leu	Val	Thr
225					230					235					240
Gly	llis	Ala	Arg	Ala	Gly	Asp	Met	Glu	Asn	Ala	Glu	Asn	Пe	Leu	Thr
				245					250					255	
Va]	Met	Arg	Asp	Ala	Gly	lle	Glu	Pro	Gly	Pro	Asp	Thr	Tyr	Leu	Ala
			260					265					270		
Leu	Leu	Asn	Ala	Tyr	Ala	Glu	Lys	Gly	Asp	lle	Asp	His	Val	Lys	Gln
		275					280					285			,
Thr	Leu	Glu	Lys	Val	Glu	Lys	Ser	Glu	Leu	His	Leu	Met	Asp	Arg	Asp
	290					295					300				
Leu	Leu	Gln	He	He	Phe	Ser	Phe	Ser	Lys	Ala	Gly	Tyr	Pro	Gln	Tyr
305					310					315					320
Val	Ser	Glu	11e	Leu	Glu	Lys	Val	Thr	Cys	Glu	Arg	Arg	Tyr	He	Pro
				325					330					335	
Asp	Ala	Met	Asn	Leu	He	Leu	Leu	Leu	Val	Thr	Glu	Lys	Leu	Glu	Asp
			340					345		•			350		
Val	Ala	Leu	Gln	lle	Leu	Leu	Ala	Cys	Pro	Val	Ser	Lys	Glu	Asp	Gly
		355					360					365			
Pro	Ser	Val	Phe	Gly	Ser	Phe	Phe	Leu	Gln	His	Cys	Val	Thr	Met	Asn
	370					375					380				
Thr	Pro	Val	Glu	Lys	Leu	Thr	Asp	Tyr	Cys	Lys	Lys	Leu	Lys	Glu	Val
385					390					395					400
Gln	Met	His	Ser	Phe	Pro	Leu	Gln	Phe	Thr	Leu	His	Cys	Ala	Leu	Leu
				405					410					415	
Ala	Asn	Lys	Thr	Asp	Leu	Ala	Lys	Ala	Leu	Met	Lys	Ala	Val	Lys	Glu
			420					425					430		

Glu	G1y	Phe	Pro	lle	Arg	Pro	His	Tyr	Phe	Trp	Pro	Leu	Leu	Val	G1 y
		435					440					445			
Arg	Arg	Lys	Glu	Lys	Asn	Val	Gln	Gly	He	He	Glu	11e	Leu	Lys	G1y
	450					455					460				
Met	Gln	Glu	Leu	$\operatorname{Gl} y$	Val	His	Pro	Asp	Gln	Glu	Thr	Tyr	Thr	Asp	Tyr
465					470					475					480
Val	Пе	Pro	Cys	Phe	Asp	Ser	Val	Asn	Ser	Ala	Arg	Λla	Пe	Leu	Gln
				485					490					495	
Glu	Asn	Gly	Cys	Leu	Ser	Asp	Ser	Asp	Met	Phe	Ser	Gln	Ala	Gly	Leu
			500					505					510		
Arg	Ser	Glu	Ala	Ala	Asn	Gly	Asn	Leu	Asp	Phe	Val	Leu	Ser	Phe	Leu
		515					520					525			
Lys	Ser	Asn	Thr	Leu	Pro	He	Ser	Leu	Gln	Ser	He	Arg	Ser	Ser	Leu
	530					535					540				
Leu	Leu	Gly	Phe	Arg	Arg	Ser	Met	Asn	He	Asn	Leu	Trp	Ser	Glu	11e
545					550					555					560
Thr	Glu	Leu	Leu	Tyr	Lys	Asp	Gly	Arg	Tyr	Cys	Gln	Glu	Pro	Arg	Gly
				565					570					575	
Pro	Thr	Glu	Ala	Val	Gly	Tyr	Phe	Leu	Tyr	Asn	Leu	Пе	Asp	Ser	Met
			580					585					590		
Ser	Asp	Ser	Glu	Val	Gln	Ala	Lys	G1u	Glu	His	Leu	Arg	Gln	Tyr	Phe
		595					600					605			
His	Gln	Leu	Glu	Lys	Met	Asn	Val	Lys	lle	Pro	Glu	Asn	He	Tyr	Arg
	610					615					620				
	He	Arg	Asn	Leu		Glu	Ser	Tyr	His	Va]	Pro	Glu	Leu	lle	Lys
625					630					635					640
Asp	Ala	His	Leu		Val	Glu	Ser	Lys		Leu	Asp	Phe	Gln		Thr
				645					650					655	
Val	Gln	Leu	Thr	Ser	Ser	Glu	Leu		Ser	Thr	Leu	GIu		Leu	Lys
			660					665					670		
Ala	Glu		Arg	Pro	He	Arg		Val	Leu	Lys	G1n		He	Leu	Val
	_	675		"			680					685			
Leu		Ser	Glu	Glu	Asn		GIn	Lys	Ala	Leu		Leu	Arg	Ala	Lys
Tr.	690	C				695					700				
Type	Chu	Sor	Acn	Mot	Vol	Than	C1v	C1v	Tyre	Ala	Ala	Lou	110	Acn	1 00

705					710					715					720
Cys	Cys	Arg	His	Asp	Lys	Val	Glu	Asp	Ala	Leu	Asn	Leu	Lys	Glu	Glu
				725					730					735	
Phe	Asp	Arg	Leu	Asp	Ser	Ser	Ala	Val	Leu	Asp	Thr	Gly	Lys	Tyr	Val
			740					745					750		
Gly	Leu	Val	Arg	Val	Leu	Ala	Lys	His	Gly	Lys	Leu	G1n	Asp	Ala	He
		755					760					765			
Asn	lle	Leu	Lys	Glu	Met	Lys	Glu	Lys	Asp	Val	Leu	He	Lys	Asp	Thr
	770					775					780				
Thr	Ala	Leu	Ser	Phe	Phe	His	Met	Leu	Asn	Gly	Ala	Ala	Leu	Arg	Gly
785					790					795					800
Glu	He	Glu	Thr	Val	Lys	Gln	Leu	His	Glu	Ala	He	Val	Thr	Leu	Gly
				805					810					815	
Leu	Ala	Glu	Pro	Ser	Thr	Asn	He	Ser	Phe	Pro	Leu	Val	Thr	Val	His
			820					825					830		
Leu	Glu	Lys	Gly	Asp	Leu	Ser	Thr	Ala	Leu	Glu	Val	Ala	He	Asp	Cys
		835					840					845			
Tyr	Glu	Lys	Tyr	Lys	Val	Leu	Pro	Arg	11e	His	Asp	Val	Leu	Cys	Lys
	850					855					860				
Leu	Val	Glu	Lys	Gly	Glu	Thr	Asp	Leu	11e	Gln	Lys	Ala	Met	Asp	Phe
865					870					875					880
Val	Ser	Gln	Glu	Gln	Gly	Glu	Met	Val	Met	Leu	Tyr	Лsp	Leu	Phe	Phe
				885					890					895	
Ala	Phe	Leu	Gln	Thr	Gly	Asn	Tyr	Lys	Glu	Ala	Lys	Lys	He	11e	Glu
			900					905					910		
Thr	Pro	Gly	11e	Arg	Ala	Arg	Ser	Ala	Arg	Leu	Gln	Trp	Phe	Cys	Asp
		915					920					925			
Arg	Cys	Val	Ala	Asn	Asn	Gln	Va1	Glu	Thr	Leu	Glu	Lys	Leu	Val	Glu
	930					935					940				
Leu	Thr	Gln	Lys	Leu	Phe	Glu	Cys	Asp	Arg	Asp	Gln	Met	Tyr	Tyr	Asn
945					950					955					960
Leu	Leu	Lys	Leu	Tyr	Lys	He	Asn	Gly	Asp	Trp	Gln	Arg	Ala	Asp	Ala
				965					970					975	
Val	Trp	Asn	Lys	He	GIn	Glu	Glu	Asn	Val	He	Pro	Arg	Glu	Lys	Thr
			980					985					990		
Leu	Arg	Leu	Leu	Ala	G] u	He	Leu	Arg	Glu	Gly	Asn	Gln	G1u	Val	Pro

	995]	000				1	005			
Phe Asp	Val	Pro	Glu	Leu	Trp	Tyr	Glu	Asp	Glu	Lys	His	Ser	Leu	Asn
1010				1	015				!	020				
Ser Ser	Ser	Ala	Ser	Thr	Thr	Glu	Pro	Asp	Phe	Gln	Lys	Asp	He	Leu
1025]	030]	035				1	040
lle Ala	Cys	Arg	Leu	Asn	G1n	Lys	Lys	Gly	Ala	Tyr	Asp	Пе	Phe	Leu
]	1045				1	050]	055	
Asn Ala	Lys	Glu	Gln	Asn	lle	Val	Phe	Asn	Ala	Glu	Thr	Tyr	Ser	Asn
		1060]	065]	1070		
Leu Ile	Lys	Leu	Leu	Met	Ser	G]u	Asp	Tyr	Phe	Thr	Gln	Ala	Met	Glu
	1075				1	080]	1085			
Val Lys	Ala	Phe	Ala	Glu	Thr	His	Пе	Lys	G] y	Phe	Thr	Leu	Asn	Asp
1090]	1095					1100				
Ala Ala	Asn	Ser	Arg	Leu	11e	He	Thr	Gln	Val	Arg	Arg	Asp	Tyr	Leu
1105]	1110]	1115]	120
Lys Glu	Ala	Val	Thr	Thr	Leu	Lys	Thr	Val	Leu	Asp	G1n	Gln	Gln	Thr
			1125]	130					1135	
Pro Ser	Arg	Leu	Ala	Val	Thr	Arg	Val	lle	Gln	Ala	Leu	Ala	Met	Lys
		1140					1145					1150		
Gly Asp	Val	Glu	Asn	lle	Glu	Val	Val	Gln	Lys	Met	Leu	Asn	Gly	Leu
	1155					1160					1165			
Glu Asp	Ser	He	Gly	Leu	Ser	Lys	Met	Val	Phe	He	Asn	Asn	He	Ala
1170					1175					1180				
Leu Ala	Gln	lle	Lys	Asn	Asn	Asp	11e	Asp	Ala	Ala	11e	Glu	Asn	lle
1185				1190					1195					1200
Glu Asn	Met	Leu	Thr	Ser	Glu	Asn	Lys	Va1	He	Glu	Pro	Gln	Tyr	Phe
			1205					1210				-	1215	
Gly Leu	Ala	Tyr	Leu	Phe	Arg	Lys	Val	He	Glu	Glu	Gln	Leu	Glu	Pro
		1220					1225					1230		
Ala Val	Glu	Lys	11e	Ser	He	Met	Ala	Glu	Arg	Leu	Ala	Asn	Gln	Phe
	1235					1240					1245			
Ala lle	Tvr	Lys	Pro	Val	Thr	Asp	Phe	Phe	Leu	Gln	Leu	Val	Asp	Ala
1250					1255					1260				
Gly Lys	Val	Asp	Asp	Ala	Arg	Ala	Leu	Leu	Gln	Arg	Cys	Gly	Ala	lle
1265				1270					1275					1280
	61	TI	D	7.7		1	1	DL		1	Λ	Aen	C	Λ

Lys Gln Gly Lys Ala Ser Thr Val Lys Ser Val Leu Glu Leu Ile Pro Glu Leu Asn Glu Lys Glu Glu Ala Tyr Asn Ser Leu Met Lys Ser Tyr Val Ser Glu Lys Asp Val Thr Ser Ala Lys Ala Leu Tyr Glu His Leu Thr Ala Lys Asn Thr Lys Leu Asp Asp Leu Phe Leu Lys Arg Tyr Ala Ser Leu Leu Lys Tyr Ala Gly Glu Pro Val Pro Phe Ile Glu Pro Pro Glu Ser Phe Glu Phe Tyr Ala Gln Gln Leu Arg Lys Leu Arg Glu Asn Ser Ser

<210> 3700

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3700

Met 11e Val Tyr Leu Glu Asn Leu 11e 11e Ser Ala Pro Lys Leu Leu Lys Leu Ile Ser Lys Phe Asp Lys Val Ser Gly Tyr Lys Ile Asn Met Gln Lys Ser Gln Ala Phe Leu Tyr lle Asn Asn Arg Gln Ser Glu Ser Gln 11e Met Ser Glu Leu Pro Phe Thr 11e Ala Thr Lys Arg 11e Lys Tyr Leu Gly 11e Gln Leu Thr Arg Asp Val Lys Asp Leu Phe Glu Glu Asn Tyr Glu Pro Leu Leu Lys Glu Ile Arg Glu Arg Thr Gln Thr Lys

Asn Ile Pro Leu Ser Trp Ile Gly Ile Ile Asn Ile Val Lys Met Ala

Thr Leu Pro Lys Val Ile Tyr Arg Ile Asn Ala Ile Pro Ile Glu Leu Pro Leu Thr Phe Phe Thr Glu Leu Glu Lys Asn Asp Phe Lys Phe His Met Glu Pro Lys Asn Ser Ser Tyr Ser Gln Asp Asn Pro Lys Gln Lys Arg Ala Lys Leu Glu Ala Ser Cys Tyr Leu Thr Ser Asn Cys Thr Thr Val Leu Gln

<210> 3701

<211> 731

<212> PRT

<213> Homo sapiens

<400> 3701

Met Glu Arg Ser Asp Glu Glu Asn Leu Lys Glu Glu Cys Ser Ser Thr Glu Ser Thr Gln Gln Glu His Glu Asp Ala Pro Ser Thr Lys Leu Gln Gly Glu Val Leu Ala Leu Glu Glu Glu Arg Ala Gln Val Leu Gly His Val Glu Gln Leu Lys Val Arg Val Lys Glu Leu Glu Gln Gln Leu Gln Glu Ser Ala Arg Glu Ala Glu Met Glu Arg Ala Leu Leu Gln Gly Glu Arg Glu Ala Glu Arg Ala Leu Leu Gln Lys Glu Gln Lys Ala Val Asp Gln Leu Gln Glu Lys Leu Val Ala Leu Glu Thr Gly 11e Gln Lys Glu Arg Asp Lys Glu Arg Ala Glu Leu Ala Ala Gly Arg Arg His Leu Glu

Ala Arg Gln Ala Leu Tyr Ala Glu Leu Gln Thr Gln Leu Asp Asn Cys

	130					135					140				
Pro	Glu	Ser	Val	Arg	Glu	Gln	Leu	Gln	Glu	Gln	Leu	Arg	Arg	Glu	Ala
145					150					155					160
Glu	Ala	Leu	Glu	Thr	Glu	Thr	Lys	Leu	Phe	Glu	Asp	Leu	Glu	Phe	Gln
				165					170					175	
Gln	Leu	Glu	Arg	Glu	Ser	Arg	Val	Glu	Glu	Glu	Arg	Glu	Leu	Ala	Gly
			180					185					190		
Gln	Gly	Leu	Leu	Arg	Ser	Lys	Ala	Glu	Leu	Leu	Arg	Ser	lle	Ala	Lys
		195					200					205			
Arg	Lys	Glu	Arg	Leu	Ala	I1e	Leu	Asp	Ser	Gln	Ala	Gly	Gln	He	Arg
	210					215					220				
Ala	Gln	Ala	Val	Gln	Glu	Ser	Glu	Arg	Leu	Ala	Arg	Asp	Lys	Asn	Ala
225					230					235					240
Ser	Leu	Gln	Leu	Leu	Gln	Lys	Glu	Lys	Glu	Lys	Leu	Thr	Va]	Leu	Glu
				245					250					255	
Arg	Arg	Tyr	His	Ser	Leu	Thr	Gly	Gly	Arg	Pro	Phe	Pro	Lys	Thr	Thr
			260					265					270		
Ser	Thr	Leu	Lys	Glu	Met	Glu	Lys	Leu	Leu	Leu	Pro	Ala	Val	Asp	Leu
		275					280					285			
Glu	Gln	Trp	Tyr	Gln	Glu	Leu	Met	Ala	Gly	Leu	Gly	Thr	Gly	Pro	Ala
	290					295					300				
Ala	Ala	Ser	Pro	His	Ser	Ser	Pro	Pro	Pro	Leu	Pro	Ala	Lys	Ala	Ser
305					310					315					320
Arg	Gln	Leu	Gln	Val	Tyr	Arg	Ser	Lys	Met	Asp	Gly	Glu	Ala	Thr	Ser
				325					330					335	
Pro	Leu	Pro	Arg	Thr	Arg	Ser	Gly	Pro	Leu	Pro	Ser	Ser	Ser	Gly	Ser
			340					345					350		
Ser	Ser	Ser	Ser	Ser	Gln	Leu	Ser	Val	Ala	Thr	Leu	Gly	Arg	Ser	Pro
		355					360					365			
Ser	Pro	Lys	Ser	Ala	Leu	Leu	Thr	Gln	Asn	Gly	Thr	Gly	Ser	Leu	Pro
	370					375					380				
Arg	Asn	Leu	Ala	Ala		Leu	G]n	Asp	He		Thr	Lys	Arg	Gln	
385					390					395					400
Ala	Leu	Gln	Gln		Gly	Gln	Gln	Val		Glu	Glu	Gln	Arg		Arg
				405					410					415	
Leu	Λla	Glu	Leu	Lys	Gln	Lys	Ala	Ala	Ala	Glu	Ala	Gln	Cys	Gln	Trp

			420					425					430		
Asp	Ala	Leu	His	Gly	Ala	Ala	Pro	Phe	Pro	Ala	Gly	Pro	Ser	Gly	Phe
		435					440					445			
Pro	Pro	Leu	Met	His	His	Ser	He	Leu	His	His	Leu	Pro	Ala	Gly	Arg
	450					455					460				
Glu	Arg	Gly	Glu	Glu	Gly	Glu	His	Ala	Tyr	Asp	Thr	Leu	Ser	Leu	Glu
465					470					475					480
Ser	Ser	Asp	Ser	Met	Glu	Thr	Ser	Ile	Ser	Thr	Gly	Gly	Asn	Ser	Ala
				485					490					495	
Cys	Ser	Pro	Asp	Asn	Met	Ser	Ser	Val	Ser	Gly	Leu	Asp	Met	Gly	Lys
			500					505					510		
He	Glu	Glu	Met	Glu	Lys	Met	Leu	Lys	Glu	Ala	His	Ala	Glu	Lys	Asn
		515					520					525			
Arg	Leu	Met	Glu	Ser	Arg	Glu	Arg	Glu	Met	G] u	Leu	Arg	Arg	Gln	Ala
	530					535					540				
Leu	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Gln	Val	Glu	Arg	Arg	Leu	Gln
545					550					555					560
Ser	Glu	Ser	Ala	Arg	Arg	Gln	Gln	Leu	Val	Glu	Lys	Glu	Val	Lys	Met
				565					570					575	
Arg	Glu	Lys	Gln	Phe	Ser	Gln	Ala	Arg	Pro	Leu	Thr	Arg	Tyr	Leu	Pro
			580			•		585					590		
He	Arg	Lys	Glu	Asp	Phe	Asp	Leu	Lys	Thr	His	He	Glu	Ser	Ser	Gly
		595					600					605			
His	Gly	Val	Asp	Thr	Cys	Leu	His	Val	Va]	Leu	Ser	Ser	Lys	Val	Cys
	610					615					620				
Arg	Gly	Tyr	Leu	Val	Lys	Met	Gly	Gly	Lys		Lys	Ser	Trp	Lys	Lys
625					630					635					640
Arg	Trp	Phe	Val		Asp	Arg	Leu	Lys	Arg	Thr	Leu	Ser	Tyr	Tyr	Val
				645					650					655	
Asp	Lys	His		Thr	Lys	Leu	Lys	Gly	Val	He	Tyr	Phe	G1n	Ala	He
			660					665					670		
Glu	Glu	Val	Tyr	Tyr	Asp	His		Arg	Ser	Ala	Ala		Ser	Pro	Asn
		675					680					685			
Pro		Leu	Thr	Phe	Cys		Lys	Thr	His	Asp		Leu	Tyr	Tyr	Met
	690	_				695				_	700				
Val	Ala	Pro	Ser	Ala	Glu	Ala	Met	Arg	lle	Trp	Met	Asp	Val	He	Val

705 710 715 720
Thr Gly Ala Glu Gly Tyr Thr Gln Phe Met Asn
725 730

<210> 3702

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3702

Met Leu Asn Thr Ser Val Pro Asn Asp Met Asp Glu Gln Gln Asn Ala 1 5 10 15

Arg Glu Ser Leu Glu Asp Gln Asn Leu Lys Asp Gln Asp His Leu Tyr
20 25 30

Glu Glu Glu Ile Gly Ala Val Gly Gly Ile Asp Tyr Asn Asp Thr Asn
35 40 45

Gln Asn Ala Gln Ser Glu Gln Asn Gly Ser Ser Asp Leu Leu Cys Asp
50
55
60

Leu Asn Thr Ser Ser Tyr Asp Thr Ser Ala Leu Cys Asn Gly Phe Pro
65 70 75 80

Leu Glu Asn Ile Cys Thr Gln Val Ile Asp Gln Asn Gln Asn Leu His
85 90 95

Gly Asp Ser Lys Gln Ser Asn Leu Thr Asn Gly Asp Tyr Val Ala Ser 100 105 110

Ser Asp Gly Thr Ser Lys Pro Ser Ser Ser Leu Ala Val Ala Ala Gln 115 120 125

Leu Arg Glu 11e 11e Pro Ser Ser Ala Leu Pro Asn Gly Thr Val Gln 130 135 140

His Ile Leu Met Pro Asp Asp Glu Gly Glu Gly Glu Leu Cys Trp Lys
145 150 155 160

Lys Val Asp Leu Gly Asp Val Lys Asn Val Asp Val Leu Ser Phe Ser 165 170 175

His Ala Pro Ser Phe Asn Phe Leu Ser Asn Ser Cys Trp Ser Lys Pro 180 185 190

Lys Glu Asp Lys Ala Val Asp Thr Ser Asp Leu Glu Val Ala Glu Asp

			195					200					205			
	Pro	Met	Gly	Leu	Gln	Gly	He	Asp	Leu	Ile	Thr	Ala	Ala	Leu	Leu	Phe
		210					215					220				
	Cys	Leu	Gly	Asp	Ser	Pro	G1 y	Gly	Arg	G1 y	11e	Ser	Asp	Ser	Arg	Met
	225					230					235					240
	Ala	Asp	He	Tyr	His	lle	Asp	Val	Gly	Thr	Gln	Thr	Phe	Ser	Leu	Pro
					245					250					255	
	Ser	Ala	Ile	Leu	Ala	Thr	Ser	Thr	Met	Val	Gly	Glu	lle	Ala	Ser	Ala
				260					265					270		
	Ser	Ala	Cys	Asp	His	Ala	Asn	Pro	Gln	Leu	Ser	Asn	Pro	Ser	Pro	Phe
			275					280					285			
	Gln	Thr	Leu	Gly	Leu	Asp	Leu	Val	Leu	G] u	Cys	Val	Ala	Arg	Tyr	Gln
		290					295					300				
	Pro	Lys	Gln	Arg	Ser	Met	Phe	Thr	Phe	Val	Cys	Gly	Gln	Leu	Phe	Arg
	305					310					315					320
	Arg	Lys	Glu	Phe	Ser	Ser	His	Phe	Lys	Asn	Val	His	Gly	Asp	Ile	His
					325					330					335	
	Ala	Gly	Leu	Asn	Gly					,						
				340												
)> 3.														
<211> 230																
<212> PRT																
	<213	3> H	omo :	sapi	ens											
		0> 3.							_				-			0.1
		Phe	Leu	Gln	Cys	Met	Leu	Val	Cys		Leu	Leu	Ser	He		Gln
	1		_		5					10					15	_
	11e	11e	Tyr	Leu	Met	Tyr	11e	He	Arg	Ser	Glu	He	Ala	Asp	Gln	Lys

Ala Cys lle Phe Leu Lys Ala Arg Asp Ser Tyr Gly Gln Leu Ala Pro

Arg Lys Val Pro Val Phe Ser Thr Gly Phe Ser Met Ser Arg Gly Ala

Glu Ile Ile Val Gly Ala Gly Cys Arg Val Trp Arg Val Gln Phe Val

65					70					75					80
Leu	Ala	Val	Gly	Phe	Val	Glu	Val	Val	Leu	Trp	Lys	Thr	Tyr	Arg	Gln
				85					90					95	
Met	Pro	Ser	Phe	Pro	Ser	Leu	Ser	Gln	Glu	Glu	Ala	Thr	Trp	Gln	Glu
			100					105					110		
Gln	Glu	Ala	Pro	Arg	Arg	Asp	Thr	Pro	Thr	Glu	Ser	Ser	Cys	Ala	Val
		115					120					125			
Ala	Ala	He	Gly	Thr	Leu	Glu	Gly	Ser	Pro	Pro	Gly	He	Ser	Thr	Ser
	130					135					140				
Phe	Phe	Arg	Lys	Val	Leu	Gly	Trp	Pro	Leu	Arg	Leu	Pro	Arg	Asp	Leu
145					150					155					160
Cys	Asn	Trp	Met	Gln	Gly	Leu	Leu	Gln	Ala	Ala	Gly	Leu	His	He	Arg
				165					170					175	
Asp	Asn	Ala	Tyr	Asn	Tyr	Cys	Tyr	Met	Tyr	Glu	Leu	Leu	Ser	Leu	Gl y
			180					185					190		
Leu	Pro	Leu	Leu	Trp	Ala	Phe	Ser	Glu	Val	Leu	Ala	Ala	Met	Tyr	Arg
		195					200					205			
Glu	Ser	Glu	Gly	Ser	Leu	Glu	Ser	lle	Cys	Asn	Trp	Val	Leu	Arg	Cys
	210					215					220				
Phe	Pro	Val	Lys	Leu	Arg										
225					230										

<210> 3704

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3704

Asp Phe Leu Asp Glu Gly Gln Pro Gly Phe Ser Ser Arg Met Ser Trp Ser Arg Pro Pro Ala Gln Glu Gln Gly Ala Gly Arg Gly Pro Ser Trp Val Arg Gly Leu Gly Gln Pro Thr Ala Ala Phe Glu Gln Gly Pro Arg Ser Ser Val Ser Pro Gln Trp Glu Gly Gly Gly Gln Gly Pro Gly Glu Leu Gly Arg Lys His Leu Leu Gly Pro Ser Gln His His Pro Thr Asp Arg His <210> 3705 <211> 178 <212> PRT <213> Homo sapiens <400> 3705 Met His Ser Met Asp Pro Gln Leu Glu Arg Gln Met Glu Thr Thr Gln Asn Leu Val Asp Ser Tyr Met Ala lle Val Asn Lys Thr Val Trp Asn Leu Met Val Gly Ala Lys Pro Lys Thr Ile Met His Ile Met Ile Tyr Asn Val His Ala Pro Pro His Gly Asp Gln Gly Val His Leu Leu Gly Ala Ala Val Gln Pro Ala Leu Ala Trp Glu Arg Glu Asp Thr His Gly Gly Val Gly Arg Ala Gly Thr Ala Ala Arg Arg Asp Ala Ala Ser Gln Ser Cys Cys Pro Thr Cys Thr Arg Val Gly Thr Arg Arg His Ser Trp

Leu Ala

<210> 3706

<211> 736

<212> PRT

<213> Homo sapiens

<400> 3706

Met Tyr Arg Glu Met Lys Asp Ser Asp Lys Glu Lys Glu Asn Gly Lys 1 10 Met Gly Cys Trp Ser Ile Glu His Val Glu Gln Tyr Leu Gly Thr Asp 20 25 Glu Leu Pro Lys Asn Asp Leu Ile Thr Tyr Leu Gln Lys Asn Ala Asp 40 45 Ala Ala Phe Leu Arg His Trp Lys Leu Thr Gly Thr Asn Lys Ser lle 50 60 55 Arg Lys Asn Arg Asn Cys Ser Gln Leu Ile Ala Ala Tyr Lys Asp Phe Cys Glu His Gly Thr Lys Ser Gly Leu Asn Gln Gly Ala Ile Ser Thr 85 90 95

Lys Ala Gly Asn Gly Gln Asn Ser Cys Gly Val Glu Asp Val Leu Gln
115 120 125

Leu Leu Arg Ilc Leu Tyr Ile Val Ala Ser Asp Pro Tyr Ser Arg Ile
130 135 140

Leu Gln Ser Ser Asp 11e Leu Asn Leu Thr Lys Glu Gln Pro Gln Ala

Ser	Gln	Glu	Asp	Gly	Asp	Glu	Gln	Pro	Gln	Phe	Thr	Phe	Pro	Pro	Asp
145					150					155					160
Glu	Phe	Thr	Ser	Lys	Lys	He	Thr	Thr	Lys	He	Leu	Gln	Gln	He	Glu
				165					170					175	
Glu	Pro	Leu	Ala	Leu	Ala	Ser	G1 y	Ala	Leu	Pro	Asp	Trp	Cys	Glu	Gln
			180					185					190		
Leu	Thr	Ser	Lys	Cys	Pro	Phe	Leu	He	Pro	Phe	Glu	Thr	Arg	Gln	Leu
		195					200					205			
Tyr	Phe	Thr	Cys	Thr	Ala	Phe	Gly	Ala	Ser	Arg	Ala	lle	Val	Trp	Leu
	210					215					220				
Gln	Asn	Arg	Arg	Glu	Ala	Thr	Va]	Glu	Arg	Thr	Arg	Thr	Thr	Ser	Ser
225					230					235					240
Val	Arg	Arg	Asp	Asp	Pro	Gly	Glu	Phe	Arg	Val	Gly	Arg	Leu	Lys	His
				245					250					255	
Glu	Arg	Va]	Lys	Val	Pro	Arg	Gly	Glu	Ser	Leu	Met	Glu	Trp	Ala	Glu
			260					265					270		
Asn	Val	Met	Gln	He	His	Ala	Лѕр	Arg	Lys	Ser	Val	Leu	Glu	Val	Glu
		275					280					285			
Phe	Leu	Gly	Glu	Glu	Gly	Thr	Gly	Leu	Gly	Pro	Thr	Leu	Glu	Phe	Tyr
	290					295					300				
Ala	Leu	Val	Ala	Ala	Glu	Phe	Gln	Arg	Thr	Asp	Leu	Gly	Ala	Trp	Leu
305					310					315					320
Cys	Asp	Asp	Asn	Phe	Pro	Asp	Asp	Glu	Ser	Arg	His	Val	Asp	Leu	Gly
				325					330					335	
Gly	Gly	Leu	Lys	Pro	Pro	Gly	Tyr	Tyr	Val	Gln	Arg	Ser	Cys	Gly	Leu
			340					345					350		
Phe	Thr	Ala	Pro	Phe	Pro	Gln	Asp	Ser	Asp	Glu	Leu	Glu	Arg	He	Thr
		355					360					365			
Lys	Leu	Phe	His	Phe	Leu	Gly	lle	Phe	Leu	Ala	Lys	Cys	lle	Gln	Asp
	370					375					380				
Asn	Arg	Leu	Val	Asp	Leu	Pro	He	Ser	Lys	Pro	Phe	Phe	Lys	Leu	Met
385					390					395					400
Cys	Met	Gly	Asp	He	Lys	Ser	Asn	Met	Ser	Lys	Leu	He	Tyr	Glu	Ser
				405					410					415	
Arg	Gly	Asp	Arg	Asp	Leu	His	Cys	Thr	Glu	Ser	Gln	Ser	Glu	Ala	Ser

			420					425					430		
Thr	Glu	Glu	Gly	His	Asp	Ser	Leu	Ser	Val	Gly	Ser	Leu	Glu	Glu	Asp
		435					440					445			
Ser	Lys	Ser	Glu	Phe	He	Leu	Asp	Pro	Pro	Lys	Pro	Lys	Pro	Pro	Ala
	450					455					460				
Trp	Phe	Asn	Gly	11e	Leu	Thr	Trp	Glu	Asp	Phe	Glu	Leu	Val	Asn	Pro
465					470					475					480
His	Arg	Ala	Arg	Phe	Leu	Lys	Glu	He	Lys	Asp	Leu	Ala	He	Lys	Arg
				485					490					495	
Arg	Gln	lle	Leu	Ser	Asn	Lys	Gly	Leu	Ser	Glu	Asp	Glu	Lys	Asn	Thr
			500					505					510		
Lys	Leu	Gln	Glu	Leu	Val	Leu	Lys	Asn	Pro	Ser	Gly	Ser	Gly	Pro	Pro
		515					520					525			
Leu	Ser	He	G]u	Asp	Leu	Gly	Leu	Asn	Phe	Gln	Phe	Cys	Pro	Ser	Ser
	530					535					540				
Arg	lle	Tyr	Gly	Phe	Thr	Ala	Val	Asp	Leu	Lys	Pro	Ser	Gly	Glu	Asp
545					550					555					560
G]u	Met	lle	Thr	Met	Asp	Asn	Ala	Glu	Glu	Tyr	Va]	Asp	Leu	Met	Phe
				565					570					575	
Asp	Phe	Cys	Met	His	Thr	Gly	lle	Gln	Lys	Gln	Met	Glu	Ala	Phe	Arg
			580					585					590		
Asp	Gly	Phe	Asn	Lys	Val	Phe	Pro	Met	Glu	Lys	Leu	Ser	Ser	Phe	Ser
		595					600					605			
His	Glu	Glu	Val	Gln	Met	He	Leu	Cys	Gly	Asn	Gln	Ser	Pro	Ser	Trp
	610					615					620				
Ala	Ala	Glu	Asp	lle	He	Asn	Tyr	Thr	Glu	Pro	Lys	Leu	Gly	Tyr	Thr
625										635					640
Arg	Asp	Ser	Pro	Gly	Phe	Leu	Arg	Phe		Arg	Val	Leu	Cys		Met
				645					650					655	
Ser	Ser	Asp		Arg	Lys	Ala	Phe		Gln	Phe	Thr	Thr		Cys	Ser
			660					665					670		
Thr	Leu		Pro	Gly	Gly	Leu		Asn	Leu	His	Pro		Leu	Thr	Val
		675					680				_	685			
Val		Lys	Val	Asp	Ala		Asp	Ala	Ser	Tyr		Ser	Val	Asn	Thr
C	690		T			695	ь	0.1	т	C	700	0.7	0.7		
1 37.63	11 0 1	14.1 C	11112	1 011	Luc	100	Unc	1.11.	1 37.30	>0 ×	N 0 32	4.111	1. 111	110	140 *

Arg Glu Arg Leu Leu Ala Ala Thr Met Glu Lys Gly Phe His Leu Asn <210> 3707 ⟨211⟩ 203 <212> PRT <213> Homo sapiens <400> 3707 Met Pro Leu Leu Ala Phe Pro Gly Pro Ala Pro Ala Cys Trp Arg Pro Leu Asp Val Gln Pro Leu Pro Gln Gln Trp Ala Leu His Ala His Leu Leu Pro Gly Arg Gly Leu Phe Gly Pro Gly Ser Arg Leu Gly Ala Ala Pro Ala Gly Pro Ala Pro Ala Ser Arg Pro Ser Gly Gly Gln Ala His Ala Ser Gly Gln Pro Leu Pro Ala Trp Arg Leu Leu Cys Met Gly

Ser Arg Pro Trp Thr Ser Ser Ser Arg Pro Leu Gln Ala Gln Leu Phe Leu Pro Ala Ala Ser Ala Gly Pro Asp Cys Arg Gln Val Gly Leu Ser Arg Asp Ser Ser Phe Leu Pro Ala Ala Ser Val Gly Pro Asp Cys His Gln Val Gly Leu Ser Lys Asp Ser Ser Cys Leu Pro Val Ala Ser Val Gly Pro Ser Arg Pro Gln Val Cys Leu Pro Arg Pro Ser Ser Gly Leu Ser Ala Ala Ser Pro Gly Ala Lys Val Pro Arg Val Arg Leu Ser Arg Leu Ser Ser Ser Cys Leu Pro Val Ala Ser Phe Ser Pro Ala Gln Leu

Met Pro Pro Gly Gly Leu Pro Arg Pro Cys Phe

195 200

<210> 3708

(211) 177

<212> PRT

<213> Homo sapiens

<400> 3708

Met Gly Leu Gln Phe Ser Gln Val 11e Ser 11e Cys Trp Ala Ala Met

1 5 10 15

Gly Ser Leu Tyr Ala Glu Met Thr Glu Asn Lys Tyr Val Cys Phe Ser 20 25 30

Ala Leu Thr 11e Leu Ser Glu Trp Gln Glu Trp Glu Gly Ala Arg Gly
35 40 45

Ser Gly Glu Leu Trp Asn Pro Glu Met Trp Gln Gly Val Ala Arg Glu 50 55 60

Gly Tyr Trp Gly Ser Trp Gly Ala Leu Ser Pro Ala Gln Cys Ser Thr
65 70 75 80

Glu Pro Cys Ser Ser Thr Ala Cys Pro Trp Ser Phe Trp Pro Ser Ser 85 90 95

Thr Gly Arg Ser Thr Thr Glu Ala Trp Gly Val Gly Thr Gly Leu Arg 100 105 110

Arg Gly Lys Gln Lys Ala Ala Ser Gly Val Leu lle Lys Leu Leu Phe 115 120 125

lle Ser Thr Cys Gln Leu Leu His Gly Ala Arg Gly Arg Arg Leu Glu 130 135 140

Thr Arg Glu Glu Ser Arg Ser Arg Gln Met Leu Asp Pro Arg Gly Leu 145 150 155 160

Gln Ala Trp Pro Ala Ala Thr Leu Val Asp Leu Gly Leu Gly 165 170 175

Ser

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<211> 509
<212> PRT
<213> Homo sapiens
<400> 3709
Met Glu Leu Lys Lys Ser Pro Asp Gly Gly Trp Gly Trp Val lle Val
Phe Val Ser Phe Leu Thr Gln Phe Leu Cys Tyr Gly Ser Pro Leu Ala
                                 25
Val Gly Val Leu Tyr lle Glu Trp Leu Asp Ala Phe Gly Glu Gly Lys
        35
                             40
                                                 45
Gly Lys Thr Ala Trp Val Gly Ser Leu Ala Ser Gly Val Gly Leu Leu
                         55
Ala Ser Pro Val Cys Ser Leu Cys Val Ser Ser Phe Gly Ala Arg Pro
                     70
                                          75
65
Val Thr 11e Phe Ser Gly Phe Met Val Ala Gly Gly Leu Met Leu Ser
                                     90
                 85
Ser Phe Ala Pro Asn Ile Tyr Phe Leu Phe Phe Ser Tyr Gly Ile Val
                               105
                                                    110
            100
Val Gly Leu Gly Cys Gly Leu Leu Tyr Thr Ala Thr Val Thr lle Thr
                            120
                                                 125
        115
Cys Gln Tyr Phe Asp Asp Arg Gly Leu Ala Leu Gly Leu 11e Ser
                        135
Thr Gly Ser Ser Val Gly Leu Phe lle Tyr Ala Ala Leu Gln Arg Met
                                         155
                                                             160
145
                    150
Leu Val Glu Phe Tyr Gly Leu Asp Gly Cys Leu Leu Ile Val Gly Ala
                                    170
                165
Leu Ala Leu Asn 11e Leu Ala Cys Gly Ser Leu Met Arg Pro Leu Gln
                                185
            180
Ser Ser Asp Cys Pro Leu Pro Lys Lys Ile Ala Pro Glu Asp Leu Pro
                            200
                                                 205
        195
Asp Lys Tyr Ser Ile Tyr Asn Glu Lys Gly Lys Asn Leu Glu Glu Asn
                        215
                                             220
lle Asn lle Leu Asp Lys Ser Tyr Ser Ser Glu Glu Lys Cys Arg lle
                                                             240
225
                    230
                                         235
```

Thr Leu Ala Asn Gly Asp Trp Lys Gln Asp Ser Leu Leu His Lys Asn

				245					250					255	
Pro	Thr	Val	Thr	His	Th.r	Lys	Glu	Pro	Glu	Thr	Tyr	Lys	Lys	Lys	Val
			260					265					270		
Ala	Glu	Gln	Thr	Tyr	Phe	Cys	Lys	Gln	Leu	Ala	Lys	Arg	Lys	Trp	Gln
		275					280					285			
Leu	Tyr	Lys	Asn	Tyr	Cys	Gly	Glu	Thr	Val	Ala	Leu	Phe	Lys	Asn	Lys
	290					295					300				
Val	Phe	Ser	Ala	Leu	Phe	lle	Ala	lle	Leu	Leu	Phe	Asp	He	Gly	Gly
305					310					315					320
Phe	Pro	Pro	Ser	Leu	Leu	Met	Glu	Asp	Val	Ala	Arg	Ser	Ser	Asn	Val
				325					330					335	
Lys	G]u	Glu	Glu	Phe	Пе	Met	Pro	Leu	lle	Ser	He	Пе	Gly	11e	Met
			340					345					350		
Thr	Ala	Val	Gly	Lys	Leu	Leu	Leu	Gly	He	Leu	Ala	Asp	Phe	Lys	Trp
		355					360					365			
lle	Asn	Thr	Leu	Tyr	Leu	Tyr	Val	Ala	Thr	Leu	Пе	Пe	Met	Gly	Leu
	370					375					380				
Ala	Leu	Cys	Ala	He	Pro	Phe	Ala	Lys	Ser	Tyr	Val	Thr	Leu	Ala	Leu
385					390					395					400
Leu	Ser	Gly	He	Leu	Gly	Phe	Leu	Thr	Gly	Asn	Trp	Ser	Пе	Phe	Pro
				405					410					415	
Tyr	Val	Thr	Thr	Lys	Thr	Val	Gly	He	Glu	Lys	Leu	Ala	His	Ala	Tyr
			420					425					430		
Gly	He	Leu	Met	Phe	Phe	Ala	Gly	Leu	Gly	Asn	Ser	Leu	Gly	Pro	Pro
		435					440					445			
lle	Val	Gly	Trp	Phe	Tyr	Asp	Trp	Thr	Gln	Thr	Tyr	Asp	He	Ala	Phe
	450					455					460				
Tyr	Phe	Ser	Gly	Phe	Cys	Val	Leu	Leu	Gly	Gly	Phe]]e	Leu	Leu	Leu
465					470					475					480
Ala	Ala	Leu	Pro	Ser	Trp	Asp	Thr	Cys		Lys	Gln	Leu	Pro		Pro
		•		485					490					495	
Ala	Pro	Thr	Thr		Leu	Tyr	Lys		Ala	Ser	Asn	Val			
			500					505							

<211> 672 <212> PRT <213> Homo sapiens <400> 3710 Met Val Val Ser Ala Gly Pro Trp Ser Ser Glu Lys Ala Glu Met Asn lle Leu Glu Ile Asn Glu Lys Leu Arg Pro Gln Leu Ala Glu Asn Lys Gln Gln Phe Arg Asn Leu Lys Glu Lys Cys Phe Val Thr Gln Leu Ala Gly Phe Leu Ala Asn Arg Gln Lys Lys Tyr Lys Tyr Glu Glu Cys Lys Asp Leu Ile Lys Ser Met Leu Arg Asn Glu Arg Gln Phe Lys Glu Glu Met Leu Ala Glu Gln Leu Lys Gln Ala Glu Glu Leu Arg Gln Tyr Lys Val Leu Val His Ser Gln Glu Arg Glu Leu Thr Gln Leu Arg Glu Lys Leu Arg Glu Gly Arg Asp Ala Ser Arg Ser Leu Asn Gln His Leu Gln Ala Leu Leu Thr Pro Asp Glu Pro Glu Lys Ser Gln Gly Gln Asp Leu Gln Glu Gln Leu Ala Glu Gly Cys Arg Leu Ala Gln His Leu Val Gln Lys Leu Ser Pro Glu Asn Asp Asn Asp Asp Asp Glu Asp Val Gln Val Glu Val Ala Glu Lys Val Gln Lys Ser Ser Ala Pro Arg Glu Met Gln Lys Ala Glu Glu Lys Glu Val Pro Glu Asp Ser Leu Glu Glu Cys Ala lle Thr Cys Ser Asn Ser His Gly Pro Tyr Asp Ser Asn Gln Pro His Arg Lys Thr Lys 11e Thr Phe Glu Glu Asp Lys Val Asp Ser Thr Leu

lle Gly Ser Ser Pro His Val Glu Trp Glu Asp Ala Val His lle lle

				245					250					255	
Pro	Glu	Asn	Glu	Ser	Asp	Asp	Glu	Glu	Glu	Glu	Glu	Lys	Gly	Pro	Val
			260					265					270		
Ser	Pro	Arg	Asn	Leu	Gln	Glu	Ser	Glu	Glu	Glu	Glu	Val	Pro	Gln	Glu
		275					280					285			
Ser	Trp	Лsp	Glu	Gly	Tyr	Ser	Thr	Leu	Ser	lle	Pro	Pro	Glu	Met	Leu
	290					295					300				
Ala	Ser	Tyr	Lys	Ser	Tyr	Ser	Ser	Thr	Phe	His	Ser	Leu	G] u	Glu	Gln
305					310					315					320
Gln	Val	Cys	Met	Ala	Val	Asp	Ile	Gly	Arg	Tyr	Arg	Trp	Asp	Gln	Val
				325					330					335	
Lys	Lys	Glu	Asp	Gln	Glu	Ala	Thr	Gly	Pro	Arg	Leu	Ser	Arg	Glu	Leu
			340					345					350		
Leu	Asp	Glu	Lys	Glu	Pro	Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys
		355					360					365			
Tyr	Ser	Thr	Pro	Ser	Gly	Cys	Leu	Glu	Leu	Thr	Asp	Ser	Cys	Gln	Pro
	370					375					380				
Tyr	Arg	Ser	Ala	Phe	Tyr	Val	Leu	Glu	Gln	Gln	Arg	Val	Gly	Leu	Ala
385					390					395					400
Val	Asp	Met	Asp	Glu	lle	Glu	Lys	Tyr	Gln	Glu	Val	Glu	Glu	Asp	Gln
				405					410					415	
Asp	Pro	Ser	Cys	Pro	Arg	Leu	Ser	Arg	Glu	Leu	Leu	Asp	Glu	Lys	Glu
			420					425					430		
Pro	Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	His	Ser	Thr	Pro	Ser
		435					440					445			
Gly	Tyr	Leu	Glu	Leu	Pro	Asp	Leu	Gly	Gln	Pro	Tyr	Ser	Ser	Ala	Val
	450					455					460				
Tyr	Ser	Leu	Glu	Glu	Gln	Tyr	Leu	Gly	Leu	Ala	Leu	Asp	Met	Asp	Arg
465					470					475					480
lle	Lys	Lys	Asp	Gln	Glu	Glu	Glu	Glu	Asp	Gln	Gly	Pro	Pro	Cys	Pro
				485					490					495	
Arg	Leu	Ser	Arg	Glu	Leu	Leu	Glu	Val	Val	Glu	Pro	Glu	Val	Leu	Gln
			500					505					510		
Asp	Ser		Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Ser		Leu	Glu	Gln
		515					520					525			
Pro	Acn	Sor	Cuc	G1n	Pro	Tyr	G1v	Sar	Sor	Pho	Typ	Ala	Lou	G Lu	$C1\nu$

530	Ę	535	540	
Lys His Val	Gly Phe Ser I	Leu Asp Val	Gly Glu Ile Glu	Lys Lys Gly
545	550		555	560
Lys Gly Lys	Lys Arg Arg (Gly Arg Arg	Ser Lys Lys Lys	Arg Arg Arg
	565		570	575
Arg Gly Arg	Lys Glu Gly G	Glu Glu Asp	Gln Asn Pro Pro	Cys Pro Arg
	580	585		590
Leu Asn Gly	Val Leu Met (Glu Val Glu	Glu Pro Glu Val	Leu Gln Asp
595		600	605	
Ser Leu Asp	Arg Cys Tyr S	Ser Thr Pro	Leu Met Tyr Phe	Glu Leu Pro
610	6	615	620	
Asp Ser Phe	Gln His Tyr A	Arg Ser Val	Phe Tyr Ser Phe	Glu Glu Gln
625	630		635	640
His lle Ser	Phe Ala Leu 1	Tyr Val Asp	Asn Arg Phe Phe	Thr Leu Thr
	645		650	655
Val Thr Ser	Leu His Leu V	Val Phe Gln	Met Gly Val Île	Phe Pro Gln
	660	665		670

<210> 3711

<211> 222

<212> PRT

<213> Homo sapiens

<400> 3711

Met Leu Asn Ser Leu Met Lys Arg Asp Leu Glu Lys His Leu Asn Val 5 10 Ser Lys Lys Phe His Gln Val Ser Ile Leu Leu Gly Ile Glu Leu Leu 25 Tyr Gln Val Asn Phe Ser Arg Glu Ala Leu Gln Glu Arg Arg Ala Arg 35 40 45 Cys Glu Thr Gln Asn lle Asp Pro Val Val Trp Thr Asn Gln Arg Val 55 Leu Lys Trp Val Arg Asp lle Asp Leu Lys Glu Tyr Ala Asp Asn Leu 70 65 75 80 Thr Asn Ser Gly Val His Gly Ala Val Leu Val Leu Glu Pro Thr Phe

				85					90					95	
Asn	Ala	Glu	Ala	Met	Ala	Thr	Λla	Leu	Gly	11e	Pro	Ser	Gly	Lys	His
			100					105					110		
He	Leu	Arg	Arg	His	Leu	Ala	Glu	Glu	Met	Ser	Ala	Val	Phe	His	Pro
		115					120					125			
Ala	Asn	Ser	Thr	Gly	He	Arg	Glu	Ala	Glu	Arg	Phe	Gly	Thr	Pro	Pro
	130					135					140				
Gly	Arg	Ala	Ser	Ser	Val	Thr	Arg	Thr	Gly	Lys	Glu	Glu	Asn	Ser	Ser
145					150					155					160
Gly	Leu	Lys	Tyr	Lys	Ala	Gly	Arg	Leu	Pro	Leu	Gly	Lys	Ile	Gly	Arg
				165					170					175	
Gly	Phe	Ser	Ser	Lys	Asp	Pro	Λsp	Phe	His	Asp	Asp	Tyr	Gly	Ser	Leu
			180					185					190		
G]n	Asn	Glu	Asp	Cys	Gly	Asp	Asp	Лsp	Pro	Gln	Ser	Arg	Leu	Glu	Gln
		195					200					205			
Cys	Arg	Leu	Glu	Gly	Tyr	Asn	Ser	Leu	Glu	Val	Thr	Asn	Val		
	210					215					220				

<210> 3712

<211> 575

<212> PRT

<213> Homo sapiens

<400> 3712

Met Tyr Ala Gly Asn Ile Pro lle Tyr Lys Thr Glu Ser Arg Ser Arg 10 Asn Glu Gln Gly Met Asp Pro Ile Thr Arg Gln Val Gly Gln His Ile 25 Glu Met Glu Pro Glu Trp Glu Ala Ala Phe Thr Leu Gln Met Lys Leu 35 40 45 Thr His Val lle Ser Met Met Gln Asp Trp Cys Ala Ser Asp Glu Lys 55 60 Val Leu Ile Glu Ala Tyr Lys Lys Cys Leu Ala Val Leu Met Gln Cys 70 75 65 80

His Gly Gly Tyr Thr Asp Gly Glu Gln Pro Ile Thr Leu Ser Ile Cys

				85					90					95	
Gly	llis	Ser	Val	Glu	Thr	He	Arg	Tyr	Cys	Val	Ser	Gln	Glu	Lys	Val
			100					105					110		
Ser	He	His	Leu	Pro	Val	Ser	Arg	Leu	Leu	Ala	Gly	Leu	His	Val	Leu
		115					120					125			
Leu	Ser	Lys	Ser	Glu	Val	Ala	Tyr	Lys	Phe	Pro	Glu	Leu	Leu	Pro	Leu
	130					135					140				
Ser	Glu	Leu	Ser	Pro	Pro	Met	Leu	lle	Glu	His	Pro	Leu	Arg	Cys	Leu
145					150					155					160
Val	Leu	Cys	Ala	Gln	Val	His	Ala	Gly	Met	Trp	Arg	Arg	Asn	Gly	Phe
				165					170					175	
Ser	Leu	Val	Asn	Gln	He	Tyr	Tyr	Tyr	His	Asn	Val	Lys	Cys	Arg	Arg
			180					185					190		
Glu	Met	Phe	Asp	Lys	Asp	Val	Val	Met	Leu	Gln	Thr	Gly	Val	Ser	Met
		195					200					205			
Met	Asp	Pro	Asn	His	Phe	Leu	Met	He	Met	Leu	Ser	Arg	Phe	Glu	Leu
	210					215					220				
	Gln	He	Phe	Ser		Pro	Asp	Tyr	Gly		Arg	Phe	Ser	Ser	
225					230					235					240
He	Thr	His	Lys		Val	Val	Gln	Gln		Asn	Thr	Leu	He		Glu
		_		245					250					255	
Met	Leu	Tyr		He	He	Met	Leu		Gly	Glu	Arg	Phe		Pro	GIy
		0.1	260			m1		265					270		
Val	Gly		Val	Asn	Ala	Thr		Glu	He	Lys	Arg		He	.lle	His
C1	,	275	3.1		D	M	280	112	C	C1	1	285	1	C	
GIN		ser	116	Lys	rro	Met	Ala	111 S	Ser	GIU		val	Lys	ser	Leu
Dua	290	Aan	C1	A an	Luc	295	Tha	C1	Mot	C1	300	Vol.	110	C1	A1.
305	oru	ASP	614	ASII	310	Glu	IIII	GTY	мет	315	Ser	val	116	61u	320
	Ala	Hic	Pho	lvc		Pro	Clv	Lou	Thr		Ara	Clv	Mot	Tur	
101	MIG	1115	THE	325	Lys	110	Ory	Leu	330	Oly	MIG	Oly	MC C	335	Olu
Leu	lve	Pro	Glu		Ala	Lys	Glu	Phe		Len	Tyr	Phe	Tyr		Phe
Lou	129.5	130	340	Cy.5	AIG	233	Giu	345	11311	e.c.u	. , .	7 110	350	111.3	1 116
Ser	Arø	Ala		Gln	Ser	Lys	Ala		Glu	Ala	Gln	Arø		Leu	Arø
	0	355				_,,	360					365	_, _		6

Arg Gln Asn Arg Glu Asp Thr Ala Leu Pro Pro Pro Val Leu Pro Pro Phe Cys Pro Leu Phe Ala Ser Leu Val Asn Ile Leu Gln Ser Asp Val Met Leu Cys 11e Met Gly Thr 11e Leu Gln Trp Ala Val Glu His Asn Gly Tyr Ala Trp Ser Glu Ser Met Leu Gln Arg Val Leu His Leu Ile Gly Met Ala Leu Gln Glu Glu Lys Gln His Leu Glu Asn Val Thr Glu Glu His Val Val Thr Phe Thr Phe Thr Gln Lys Ile Ser Lys Pro Gly Glu Ala Pro Lys Asn Ser Pro Ser lle Leu Ala Met Leu Glu Thr Leu Gln Asn Ala Pro Tyr Leu Glu Val His Lys Asp Met 11e Arg Trp 11e Leu Lys Thr Phe Asn Ala Val Lys Lys Met Arg Glu Ser Ser Pro Thr Ser Pro Val Ala Glu Thr Glu Gly Thr Ile Met Glu Glu His Asn Phe Arg Val Gln Gly Thr Lys Thr Lys Leu Arg Gly Arg Glu Lys Gln Arg Leu Pro Asp Cys Ala Glu Lys Arg Ser Trp Leu Arg Cys Leu Lys Cys Ser Gly 11e Leu Leu Met Lys Thr Lys Asn Ser Phe Ser Arg His

<210> 3713

<211> 617

<212> PRT

<213> Homo sapiens

<400> 3713

Met Gly Glu Thr Leu Lys Asp Pro Val lle Lys Arg Cys Cys Glu Ala 1 5 10 15

Pro	Asn	Arg	Leu	Ser	Asp	Leu	Gln	Asn	Val	Ser	Glu	Gly	Leu	Glu	Lys
			20					25					30		
Cys	Gln	Lys	Ser	Leu	Asn	Лsp	Tyr	Leu	Asp	Ser	Lys	Arg	Asn	Ala	Phe
		35					40					45			
Pro	Arg	Phe	Phe	Phe	He	Ser	Лѕр	Asp	Glu	Leu	Leu	Ser	11e	Leu	G1 y
	50					55					60				
Ser	Ser	Asp	Pro	Leu	Cys	Val	Gln	Glu	His	Met	He	Lys	Met	Tyr	Asp
65					70					75					80
Asn	He	Ala	Ser	Leu	Arg	Phe	Asn	Asp	Gly	Asp	Ser	Gly	Glu	Lys	Leu
				85					90					95	
Val	Ser	Ala	Met	He	Ser	Ala	Glu	G1 y	Glu	Val	Met	Glu	Phe	Arg	Lys
			100					105					110		
lle	Val	Arg	Ala	Glu	Gly	Arg	Va]	Glu	Asp	Trp	Met	Thr	Ala	Val	Leu
		115					120					125			
Asn	Glu	Met	Arg	Arg	Thr	Asn	Arg	Leu	lle	Thr	Lys	Glu	Ala	He	Phe
	130					135	•				140				
Arg	Tyr	Cys	Glu	Asp	Arg	Ser	Arg	Val	Asp	Trp	Met	Leu	Leu	Tyr	Gln
145					150					155					160
Gly	Met	Val	Val		Ala	Ala	Ser	Gln	Val	Trp	Trp	Thr	Trp	Glu	Val
				165					170					175	
G]u	Asp	Val		His	Lys	Ala	Gln		Gly	Glu	Lys	Gln	Ala	Met	Lys
			180					185					190		
Asn	Tyr		Arg	Lys	Met	His		Gln	He	Asp	Glu		Val	Thr	Arg
W		195	_				200					205			
He		Met	Pro	Leu	Ser	Lys	Asn	Asp	Arg	Lys		Tyr	Asn	Thr	Val
	210					215					220	_			
	He	He	Asp	Val		Ala	Arg	Asp	He		Asp	Ser	Phe	He	
225	_				230					235			0.1		240
Gly	Ser	He	Leu		Ala	Arg	Glu	Phe		Trp	Glu	Ser	GIn		Arg
131	m	m.		245	0.1	.		<i>0.</i> 1	250				61	255	m)
Phe	lyr	Trp		Arg	Glu	Pro	Asp		Leu	Asn	11e	Arg		Cys	lhr
			260	_				265		0.1			270		
Gly	lhr		Gly	lyr	Gly	Tyr		lyr	Met	GIV	Leu		Gly	Arg	Leu
., .		275	15		m,		280		T.		m)	285	m	0.1	
Val		Ihr	Pro	Leu	Thr	Asp	Arg	11e	Tyr	Leu		Leu	Ihr	Gln	Ala
	290					295					300				

Leu	Ser	Met	Tyr	Leu	Gly	Gly	Ala	Pro	Ala	G1 y	Pro	Ala	Gly	Thr	Gly
305					310					315					320
Lys	Thr	Glu	Thr	Thr	Lys	Asp	Leu	Ala	Lys	Ala	Leu	Gly	Leu	Leu	Cys
				325					330					335	
Val	Val	Thr	Asn	Cys	Gly	Glu	Gly	Met	Asp	Tyr	Arg	Ala	Val	Gly	Lys
			340					345					350		
11e	Phe	Ser	Gly	Leu	Ala	Gln	Cys	Gly	Ala	Trp	Gly	Cys	Phe	Asp	Glu
		355					360					365			
Phe	Asn	Arg	lle	Asp	Ala	Ser	Val	Leu	Ser	Val	He	Ser	Ser	Gln	He
	370					375					380				
Gln	Thr	He	Arg	Asn	Ala	Leu	Ile	His	Gln	Leu	Thr	Thr	Phe	Gln	Phe
385					390					395					400
Glu	Gly	Gln	Glu	lle	Ser	Leu	Asp	Ser	Arg	Met	Gly	lle	Phe	He	Thr
				405					410					415	
Met	Asn	Pro	Gly	Tyr	Ala	Gly	Arg	Thr	Glu	Leu	Pro	Glu	Ser	Val	Lys
			420					425					430		
Ala	Leu	Phe	Arg	Pro	Val	Val	Val	He	Val	Pro	Asp	Leu	Gln	Gln	He
		435					440					445			
Cys	Glu	Ile	Met	Leu	Phe	Ser	Glu	Gly	Phe	Leu	Glu	Ala	Lys	Thr	Leu
	450					455					460				
Ala	Lys	Lys	Met	Thr	Val	Leu	Tyr	Lys	Leu	Ala	Arg	Glu	Gln	Leu	Ser
465					470					475					480
Lys	Gln	Tyr	His	Tyr	Asp	Phe	Gly	Leu	Arg	Ala	Leu	Lys	Ser	Val	Leu
				485					490					495	
Val	Met	Ala	Gly	Glu	Leu	Lys	Arg	Gly	Ser	Ser	Asp	Leu	۸rg	Glu	Asp
			500					505					510		
Va]	Val	Leu	Met	Arg	Ala	Leu	Arg	Asp	Met	Asn	Leu	Pro	Lys	Phe	Va1
		515					520					525			
Leu	Glu	Asp	Val	Pro	Leu	Phe	Leu	Gŀy	Leu	He	Ser	Asp	Leu	Phe	Pro
	530					535					540				
Gly	Leu	Asp	Cys	Pro	Arg	Val	Arg	Tyr	Pro	Asp	Phe	Asn	Asp	Ala	Val
545					550					555					560
G]u	Gln	Val	Leu		Glu	Asn	Gly	Tyr		Va]	Leu	P.ro	He		Val
				565					570					575	
Asp	Lys	Val		Gln	Met	Phe	Glu		Met	Leu	Thr	Arg		Thr	Thr
			520					595					500		

Met Val Val Gly Pro Thr Arg Gly Gly Lys Ser Val Val 11e Asn Thr
595
600
605

Leu Cys Gln Ala Gln Thr Asn Leu Ser
610
615

<210> 3714

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3714

Met Gln Phe Ser Lys Pro Arg Lys Leu Val Asn Thr lle Asn Pro Gly

1 5 10 15

Ala Arg Phe Met Thr Thr Ala Met Tyr Asp Ala Arg Glu Ala Ile Ile 20 25 30

Pro Gly Ser Val Tyr Asp Arg Ser Ser Gln Gly Arg Pro Ser Ser Met
35 40 45

Tyr Phe Gln Thr His Asp Gln He Gly Met He Ser Ala Gly Pro Ser 50 55 60

His Val Ala Ala Met Asn Ile Pro Ile Pro Phe Asn Leu Val Met Pro 65 70 75 80

Pro Met Pro Pro Pro Gly Tyr Phe Gly Gln Ala Asn Gly Pro Ala Ala 85 90 95

Gly Glu His Leu Trp Leu Arg Leu Gly Val Ala Leu Leu Arg Ala Leu 100 105 110

Glu Gly Val Leu Val Cys Glu Ala Leu Ala Ser Phe Gly Ser Pro Trp
115 120 125

Thr Ala Val Phe Gln Gly Glu Ala Pro Arg Lys Ala Arg Leu Val Val 130 135 140

Gly Asp Ala Arg Arg Thr Ala Leu Gly Phe Leu Asp Pro Ala Arg Leu 145 150 155 160

Thr Ser Pro Thr Ala Lys Pro Ala Arg Met Trp Arg His Ser Pro Ser 165 170 175

Leu Arg Ala Pro

<211> 111 <212> PRT <213> Homo sapiens <400> 3715 Met Pro Pro Cys Ile Gln Pro Arg Lys Tyr Trp Thr Leu Gln Arg Pro 1 5 10 15 Val Cys Ser Val Asn Leu Ala Pro Ser Gly Pro Pro Glu Thr His Arg 25 Val Ser Arg Ala Val Gly Met Pro Leu Ser Leu Thr His Pro Thr Leu 40 Phe Gln Ala Arg His Pro Ser Leu Phe Leu Thr Leu Asp Tyr Val Leu 50 55 60 Val Tyr Pro Leu Thr Ser Gly Ser Val Ser Gln Leu Ile Ile Ser Leu 70 75 Ser His Ser Leu Ser His Ser Pro Ser Arg Ser His Ser Leu Ala Leu 85 90 Leu Arg Phe Thr Arg Leu Ala IIe Ser Thr Ser Asp Thr Leu Pro 100 105 110 <210> 3716 <211> 138 <212> PRT <213> Homo sapiens <400> 3716 Met Thr Leu Gly Cys Asp Leu Gly Gln Met Val Ser Arg Glu Thr Ala 10 Gly Asn Cys His His Ser Ile Ser Leu Arg Thr Pro Met Asp Cys Cys

25

45

Ala Gln Arg Arg Pro His Gly Tyr His Ser Gly Cys Gln Trp Pro His

40

35

<210> 3715

Thr Val Ser Thr Phe Pro Gly Glu Leu Arg Ser Arg Leu Trp Val Trp His Phe Ala Ser Val Pro Arg Val Lys Cys Ala Ser Ala Ser Phe Leu Glu Asp Arg Val Cys Asp Phe Cys Asp Ser Ala Leu Ala Gln Asp Ser Arg Asp His Val His 11e Cys Arg Pro Ser Arg Glu Gln Arg Glu Thr Phe Arg Ala Val 11e Lys Thr Ser Gln Ala Glu Asn Ser Leu Cys Pro His Trp His Thr Trp Cys Leu Tyr Phe His

<210> 3717

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3717

Met Leu His Gln Ser Gly Lys Phe Leu Ile Pro Asp Ile Lys Glu Glu Glu Lys Ser Tyr Gln Val Ile Arg Trp Phe Ser Pro Glu Asp His Gln Lys Arg Ile Lys Lys His Phe Asp Ser Tyr Ile Glu Thr Ala Leu Asp Gly Arg Lys Glu Ser Glu Ala Leu Val Lys Leu Met Glu 11e Phe Gly Thr Gln Cys Ser Tyr Leu Leu Ser Arg Lys Asp lle Met Asp Ser Leu Lys Asn Glu Asn Tyr Asp Leu Val Phe Val Glu Ala Phe Asp Phe Cys Ser Phe Leu IIe Ala Glu Lys Leu Val Lys Pro Phe Val Ala IIe Leu Pro Thr Thr Phe Gly Ser Leu Asp Phe Gly Leu Pro Ser Pro Leu Ser

Tyr Val Pro Val Phe Pro Ser Leu Leu Thr Asp His Met Asp Phe Trp Gly Arg Val Lys Asn Phe Leu Met Phe Phe Ser Phe Ser Arg Ser Gln Trp Asp Met Gln Ser Thr Phe Asp Asn Thr lle Lys Glu His Phe Pro Glu Gly Ser Arg Pro Val Leu Ser His Leu Leu Leu Lys Ala Glu Leu Trp Phe Val Asn Ser Asp Phe Ala Phe Asp Phe Ala Arg Pro Leu Leu Pro Asn Thr Val Tyr 11e Gly Gly Leu Met Glu Lys Pro 11e Lys Pro Val Pro Gln Asn Gly Gln Pro Ala Leu Phe Thr Thr Pro Ser Leu Phe Ser Ser Gly Val Tyr Pro Glu Pro Leu Arg Trp Leu

<210> 3718

<211> 392

<212> PRT

<213> Homo sapiens

<400> 3718

Met Gln Ser Gly Gly Ser Leu Pro Phe Cys Cys Tyr Leu Pro Ser Val Ser Ser Gln Leu Leu Arg Glu Ser Tyr Cys Asn Phe lle Lys Arg Thr Gln Cys Lys Ser Ser Lys Leu Met Phe Ser Arg Asp Phe Leu Ser Gly Gln Lys Tyr Cys Arg Cys Leu Leu Trp Ala Leu Pro Asp His Pro Arg Arg Arg Gly Pro Thr Ser Ala Asn Ala Leu Pro Leu Ser Ala Glu Leu Val Met Leu Leu Glu Trp Trp Ser Cys Thr Glu Cys Thr Leu Phe

Thr	Asp	Gln	Ala	Thr	Val	Glu	Arg	Phe	Gly	Lys	Glu	His	Ala	Va]	lle
			100					105					110		
He	Leu	Asn	His	Asn	Phe	Glu	Пе	Asp	Phe	Leu	Cys	Gly	Trp	Thr	Met
		115					120					125			
Cys	Glu	Arg	Phe	Gly	Val	Leu	Gly	Ser	Ser	Lys	Va]	Leu	Ala	Lys	Lys
	130					135					140				
Glu	Leu	Leu	Tyr	Val	Pro	Leu	11e	$\operatorname{Gl} y$	Trp	Thr	Trp	Tyr	Phe	Leu	Glu
145					150					155					160
He	Val	Phe	Cys	Lys	Arg	Lys	Trp	Glu	Glu	Asp	Arg	Asp	Thr	Val	Val
				165					170					175	
Glu	Gly	Leu	Arg	Arg	Leu	Ser	Asp	Tyr	Pro	Glu	Tyr	Met	Trp	Phe	Leu
			180					185					190		
Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr	G]u	Thr	Lys	His	Arg	Val	Ser
		195					200					205			
Met	Glu	Va1	Ala	Ala	Ala	Lys	Gly	Leu	Pro	Val	Leu	Lys	Tyr	His	Leu
	210					215					220				
Leu	Pro	Arg	Thr	Lys	Gly	Phe	Thr	Thr	Ala	Va]	Lys	Cys	Leu	Arg	G1 y
225					230					235					240
Thr	Val	Ala	Ala	Val	Tyr	Asp	Val	Thr	Leu	Asn	Phe	Arg	G1 y	Asn	Lys
				245					250					255	
Asn	Pro	Ser	Leu	Leu	Gly	He	Leu	Tyr	Gly	Lys	Lys	Tyr	Glu	Ala	Asp
			260					265					270		
Met	Cys	Val	Arg	Arg	Phe	Pro	Leu	GIu	Asp	Пe	Pro	Leu	Asp	Glu	Lys
		275					280					285			
Glu	Ala	Ala	G]n	Trp	Leu		Lys	Leu	Tyr	Gln		Lys	Asp	Ala	Leu
	290					295					300				
	Glu	He	Tyr	Asn		Lys	G1 y	Met	Phe		Gly	Glu	Gln	Phe	
305				_	310					315		_	_		320
Pro	Ala	Arg	Arg	Pro	Trp	Thr	Leu	Leu		Phe	Leu	Ser	Ттр		Thr
			_	325			_		330					335	
He	l.eu	Leu		Pro	Leu	Phe	Ser		Val	Leu	Gly	Val		Ala	Ser
	_		340				<i>m</i> .	345					350		
G1 y	Ser		Leu	Leu	He	Leu		Phe	l.eu	GIV	Phe		Gly	Ala	Ala
6	151	355	1, 1				360	6.7	,, ,	re.	63	365	C 1		6.1
Ser		Gly	Val	Arg	Arg		He	Gly	Val	thr		He	Ыu	Lys	61 y
	370					375					380				

Ser Ser Tyr Gly Asn Gln Glu Phe 385 390

<210> 3719

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3719

Met Asn Tyr Leu Phe Leu Gly Gly Cys Leu His Glu Pro Val Ser His

1 5 10 15

Thr Phe Ala Leu Val Ala Gln Ala Glv Val Gln Trp Arg Asn Leu Glv
35 40 45

Ser Pro Gln Pro Pro Pro Pro Arg Phe Lys Gln Phe Ser Arg Leu Ser 50 55 60

Leu Pro Ser Ser Trp Asp Tyr Arg His Ala Pro Ser Arg Leu Ala Asn
65 70 75 80

Phe Phe Phe Phe Phe Val Phe Leu Val Glu Met Gly Phe Leu His Val
85 90 95

Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser 100 105 110

Ala Cys Gln Ser Ala Gly lle Thr Ser Val Ser His His Ala Gln Pro 115 120 125

Ile Ser Leu Phe Ser Lys Lys Lys Gly Gly Arg Phe Leu Lys Ile Phe 130 135 140

Ser Ala Phe Ala

145

<210> 3720

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3720 Met Glu Ala Glu Ala Trp Gly Ser Gln Ala Arg Ala Gly Leu Gly Ala 1 10 15 Ala Glu Asn Cys Leu Glu Gly Gly Asn Gln Ala Phe Leu Leu Glu Arg 20 25 30 Val Thr Gly Thr Lys Gly Arg Gly Gln Gly Gln Pro Leu Glu Arg Ala 40 Gly Glu Glu Gly Glu Ala Gly Gly Asp Pro Arg Arg Asp Pro Gly Glu 50 55 Val Val Ala Lys Ser Arg Val Arg Ala Arg Pro His Leu Ser Leu Tyr 70 75 Pro Ala Leu Pro Gly Val Ala Leu Ala Leu Leu Cys Cys Pro Leu Gln 85 90 Asp Arg Cys Leu Arg Leu Val Pro Ala Cys Pro Thr Ala Gly Pro Gln 100 105 110 His Pro Gln Val Leu Pro Trp Ala Leu Gln Lys Gln Gly Val Val Arg 120 Ser Gly Pro Trp Ala Thr Glu Glu Met Val Trp Gly Thr Arg Thr Gly 130 135 140 Val Gly Gly Leu Thr Ala Val Phe 145 150 <210> 3721 <211> 147 <212> PRT <213> Homo sapiens <400> 3721 Met Asn Leu Pro His Cys Ser Gly Asn Ser Arg Gly Arg Pro Pro Pro 10

Gly Pro Ala Met Arg Arg Asp Gly Gln Ala Gly Pro Ala Leu Gly Gly

Gly Arg Pro Pro Pro His Thr Tyr Leu Glu Arg Pro Glu Ala Gln Leu

40

35

25

Lys Gln Tyr Leu Val Phe Gly Gly Asp Ala Asp Gly Lys His Gly Lys His His Val Val Asp Ala Glu Gln Arg Asp Lys Gln Glu Arg Gly Leu Gly Gln Pro Pro Ala Gln Lys Glu Met Ser Gln Leu Ser Cys Trp Thr Leu Gly Pro Ser Ala Ser Leu Ala Gly Ser Phe Ser Gly Gly Gly Ser Trp Val Trp Glu Gly Leu His Thr Ser Ser Pro Leu Leu Glu Ser Pro Pro Asn Lys Lys Asn His Cys Phe Phe Thr Phe Met Ser Glu Ala Pro Val His lle <210> 3722 <211> 106 <212> PRT <213> Homo sapiens <400> 3722 Met Asp Asn Pro Leu Leu Lys Tyr Ser Ala Lys Asp Tyr Phe Phe Lys Ala Ala Leu Cys His Phe lle Val Asp Glu Leu Asn Ala Lys Leu Ala Leu Glu Lys Tyr Glu Glu Met Phe Pro Ala Phe Thr Asp Ser Arg Glu Cys Lys Leu Leu Lys Lys Leu Leu Glu Ala His Glu Glu Gln Asn Ser Glu Ala Tyr Thr Glu Ala Val Lys Glu Phe Asp Ser Ile Ser Arg Leu Asp Gln Trp Leu Thr Thr Met Leu Leu Arg 11e Lys Lys Ser 11e Gln Gly Asp Gly Glu Gly Asp Gly Asp Leu Lys

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<211> 532
<212> PRT
<213> Homo sapiens
<400> 3723
Met Ser Ile His Leu Arg Glu Asp Ser Ser Gln Thr His Val Leu Met
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                                      10
Met Lys Gly Ala Pro Glu Arg Ile Leu Glu Phe Cys Ser Thr Phe Leu
             20
                                  25
Leu Asn Gly Gln Glu Tyr Ser Met Asn Asp Glu Met Lys Glu Ala Phe
                             40
                                                  45
Gln Asn Ala Tyr Leu Glu Leu Gly Gly Leu Gly Glu Arg Val Leu Gly
     50
                         55
                                              60
Phe Cys Phe Leu Asn Leu Pro Ser Ser Phe Ser Lys Gly Phe Pro Phe
                     70
                                          75
Asn Thr Asp Glu lle Asn Phe Pro Met Asp Asn Leu Cys Phe Val Gly
                 85
                                      90
Leu Ile Ser Met 11e Asp Pro Pro Arg Ala Ala Val Pro Asp Ala Val
            100
                                105
                                                     110
Ser Lys Cys Arg Ser Ala Gly lle Lys Val lle Met Val Thr Gly Asp
                            120
                                                 125
His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly Val Gly Ile Ile Ser
    130
                        135
                                             140
Glu Gly Thr Glu Thr Ala Glu Glu Val Ala Ala Arg Leu Lys lle Pro
                    150
                                         155
lle Ser Lys Val Asp Ala Ser Ala Ala Lys Ala lle Val Val His Gly
                165
                                     170
                                                         175
Ala Glu Leu Lys Asp 11e Gln Ser Lys Gln Leu Asp Gln 11e Leu Gln
            180
                                185
                                                     190
Asn His Pro Glu lle Val Phe Ala Arg Thr Ser Pro Gln Gln Lys Leu
                            200
                                                 205
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lle lle Val Glu Gly Cys Gln Arg Leu Gly Ala Val Val Ala Val Thr

<210> 3723

Gly	Asp	Gly	Val	Asn	Asp	Ser	Pro	Ala	Leu	Lys	Lys	Ala	Asp	He	Gly
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He	Ala	Met	Gly	lle	Ser	Gly	Ser	Asp	Val	Ser	Lys	Gln	Ala	Λla	Asp
				245					250					255	
Met	He	Leu	Leu	Asp	Asp	Asn	Phe	Ala	Ser	11e	Val	Thr	Gly	Val	Glu
			260					265					270		
Glu	Gly	Arg	Leu	He	Phe	Asp	Asn	Leu	Lys	Lys	Ser	He	Met	Tyr	Thr
		275					280					285			
Leu	Thr	Ser	Asn	He	Pro	Glu	lle	Thr	Pro	Phe	Leu	Met	Phe	Пe	He
	290					295					300				
Leu	Gly	He	Pro	Leu	Pro	Leu	Gly	Thr	Ile	Thr	Ile	Leu	Cys	He	Asp
305					310					315					320
Leu	Gly	Thr	Asp	Met	Va]	Pro	Ala	Пе	Ser	Leu	Ma	Tyr	Glu	Ser	Ala
				325					330					335	
Glu	Ser	Asp	He	Met	Lys	Arg	Leu	Pro	Arg	Asn	Pro	Lys	Thr	Asp	Asn
			340					345					350		
Leu	Val	Asn	His	Arg	Leu	He	Gly	Met	Ala	Tyr	Gly	Gln	He	Gly	Met
		355					360					365			
lle		Ala	Leu	Ala	Gly	Phe	Phe	Thr	Tyr	Phe		Ile	Leu	Ala	G] u
	370					375					380				-
	Gly	Phe	Arg	Pro		Asp	Leu	Leu	Gly		Arg	Leu	His	Trp	
385					390					395					400
Asp	Lys	Tyr	Leu		Asp	Leu	Glu	Asp		Tyr	Gly	Gln	Gln		Thr
_				405					410					415	
Tyr	Glu	GIn	Arg	Lys	Val	Val	Glu		Thr	Cys	GIn	Thr		Phe	Phe
	TD)		420	v. 1	., .	0.1	T	425		,	7.1	7.1	430		Tr.I
val	ınr		Va]	vai	vai	Gin		Ala	Asp	Leu	11e		Ser	Lys	mr
Δ	A	435	C	1	Dha	Cl.	440	C1	Mat	Λ == ~	Λ	445	Val	Lau	11.
Arg		ASII	Ser	Leu	rne	455	GIN	GIY	мет	Arg	460	LyS	vai	Leu	116
Dha	450	110	Leu	Clu	C1.,		Lou	Lau	110	Ala		Lou	Son	Tun	Tha
465	Oly	116	Leu	Olu	470	1 1111	Leu	Leu	ΛΙα	475	THE	Leu	361	1 y 1	480
	Clv	Mot	Asp	Val		Lou	Ara	Mot	Tur		Lau	Lve	110	The	
110	OIY	sic t	ush	485	ma	Leu	ив	are t	490	, 10	Leu	Lyo	310	495	ιiβ
Trn	Len	Cve	Ala		Pro	Tur	Ser	He		He	Phe	Val	Tvr		Glu
		-,5	500		.10	- 3 -	001	505	,,,,,,	.10			510	۹۰	U J U

```
lle Arg Lys Leu Leu lle Arg Gln His Pro Asp Gly Trp Val Glu Arg
                            520
                                                 525
        515
Glu Thr Tyr Tyr
    530
<210> 3724
<211> 1139
<212> PRT
<213> Homo sapiens
<400> 3724
Met Ala Gly Ile Ile Lys Lys Gln Ile Leu Lys His Leu Ser Arg Phe
                  5
                                      10
Thr Lys Asn Leu Ser Pro Asp Lys Ile Asn Leu Ser Thr Leu Lys Gly
                                                      30
             20
                                  25
Glu Gly Glu Leu Lys Asn Leu Glu Leu Asp Glu Glu Val Leu Gln Asn
                             40
                                                  45
Met Leu Asp Leu Pro Thr Trp Leu Ala Ile Asn Lys Val Phe Cys Asn
     50
                         55
Lys Ala Ser lle Arg lle Pro Trp Thr Lys Leu Lys Thr His Pro lle
                     70
                                          75
Cys Leu Ser Leu Asp Lys Val Ile Met Glu Met Ser Thr Cys Glu Glu
                 85
                                      90
Pro Arg Ser Pro Asn Gly Pro Ser Pro 11e Ala Thr Ala Ser Gly Gln
            100
                                 105
                                                     110
Ser Glu Tyr Gly Phe Ala Glu Lys Val Val Glu Gly Ile Ser Val Ser
        115
                             120
                                                 125
Val Asn Ser Ile Val Ile Arg Ile Gly Ala Lys Ala Phe Asn Ala Ser
    130
                                             140
                         135
Phe Glu Leu Ser Gln Leu Arg Ile Tyr Ser Val Asn Ala His Trp Glu
                    150
                                        155
His Gly Asp Leu Arg Phe Thr Arg Ile Gln Asp Pro Gln Arg Gly Glu
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Val Leu Thr Phe Lys Glu lle Asn Trp Gln Met lle Arg Ile Glu Ala

			180					185					190		
Ası	Ala	Thr	Gln	Ser	Ser	His	Leu	Glu	lle	Met	Cys	Ala	Pro	Val	Arg
		195					200					205			
Lei	lle	Thr	Asn	Gln	Ser	Lys	He	Arg	Val	Thr	Leu	Lys	Arg	Met	Leu
	210					215					220				
Lys	s Asp	Cys	Asn	Val	lle	Ala	Thr	Lys	Leu	Val	Leu	11e	Leu	Asp	Asp
228	5				230					235					240
Let	ı Leu	Trp	Val	Leu	Thr	Asp	Pro	Gln	Leu	Lys	Ala	Met	Va]	Gln	Tyr
				245					250					255	
Ala	Lys	Ser	Leu	Ser	Glu	Ala	He	Glu	Lys	Ser	Thr	Glu	Gln	Arg	Lys
			260					265					270		
Sei	- Met	Ala	Pro	Glu	Pro	Thr	Gln	Ser	Ser	Thr	Val	Val	Ala	Ser	Ala
		275					280					285			
Gli	n Gln	Val	Lys	Thr	Thr	Gln	Thr	Ser	Asn	Ala	Pro	Asp	Val	Asn	Asp
	290					295					300				
Ala	a Ile	Val	Lys	Leu	Phe	Asn	Asp	Phe	Asp	Val	Lys	Glu	Thr	Ser	His
309	5				310					315					320
His	s Leu	Val	He	Ser	His	Leu	Asp	Leu	His	lle	Cys	Asp	Asp	Ile	His
				325					330					335	
Ala	a Lys	Glu	Lys	Glu	Ser	Asn	Arg	Arg	lle	Thr	Gly	Gly	Ala	Met	Gln
			340					345					350		
Let	ı Ser	Phe	Thr	Gln	Leu	Thr	He	Asp	Tyr	Tyr	Pro	Tyr	His	Lys	Ala
		355					360					365			
Gl	/ Asp	Ser	Cys	Asn	His	Trp	Met	Tyr	Phe	Ser	Asp	Ala	Thr	Lys	Thr
	370					375					380				
	s Asn	Gly	Trp	Ala		Glu	Leu	Leu	His		Phe	Glu	Cys	Asn	
38					390					395					400
Glu	ı Met	Leu	Lys		Ala	Va]	Lys	Asp		Asn	Va]	Gly	Ser		Pro
				405					410					415	
Ly:	s Ser	Pro		His	Ala	Ser	Pro		llis	Thr	Gln	Thr		Lys	Asp
			420			_		425		-			430		
Ty	· Pro		Lys	Gly	Thr	Cys		Thr	Pro	Ser	Val		Ser	Gln	Gln
475	,	435					440			,, -	., .	445	,		
Sei	Lys	Ala	Lys	Leu	Met		Ser	Ser	Val	Val		Arg	Leu	Λla	Asp
Di	450	7.3	T	C.3	37 3	455	Tha		C1	61	460	Α.	C	c	D
Dh.	100	110	1 2 2 2 -	1 1	1/0!	\ a	I lo re	A 1 c-		1.15	5 11 C	11 100	> 0 31	> 0 r	レンハヘ

465					470					475					480
Lys	Ser	Met	He	Cys	Cys	Asn	Lys	Lys	Ser	Leu	Tyr	Leu	Pro	Gln	Glu
				485					490					495	
Met	Ser	Ala	Val	Tyr	He	Glu	Phe	Thr	Glu	Tyr	Tyr	Tyr	Pro	Asp	Gly
			500					505					510		
Lvs	Asp	Phe	Pro	He	Pro	Ser	Pro	Asn	Leu	Tyr	Ser	Gln	Leu	Asn	Ala
Í		515					520			·		525			
Leu	Gln		Thr	Val	Asp	Glu		Ser	He	Leu	Tro	Leu	Asn	Gln	Phe
	530					535	0				540				
Lou		Acn	Leu	lve	Gln		Leu	Asn	Gln	Phe		Ala	Val	Tyr	lve
545	Lcu	пэр	Leu	Lys	550	501	Bed	71511	0111	555	mc c	711 G	, 01	.,.	560
	Acn	Acn	Acn	Sor		Sor	Acn	Clu	Hic		Acn	Val	Ara	Val	
Leu	nsn	nsh	nsn	565	Lys	261	лэр	OTU	570	vaj	nsp	101	Mg	575	изр
C1	Lau	Mad	Lan		Dlag	V a 1	71.	Dag		C1	Vol.	Luc	Com	•	Cva
G1 À	Leu	мет		Lys	rne	vai	116		261	GIU	vai	Lys		uro	Cys
	C1		580	D.		A 1	7.7	585 C	11.	C1	_	C	590	М	11
HIS	GIN		GIN	Pro	Arg	Ala		ser	11e	GIN	ser	Ser	61u	мет	116
	mı	595	701			0	600					605			0.1
Ala		Asn	ihr	Arg	HIS		Pro	Asn	Cys	Arg		Ser	Asp	Leu	Glu
	610					615					620	_			
	Leu	Phe	GIn	Asp		Lys	Asp	Cys	Asp		Phe	Ser	Lys	Ihr	
625					630					635					640
Thr	Ser	Phe	Pro		Ser	Cys	Asp	Asn		Asn	Leu	Leu	His		He
				645					650					655	
Phe	Gln	Arg	His	Ala	His	Glu	Gln	Asp	Thr	Lys	Met	His	G] u	He	Tyr
			660					665					670		
Lys	Gly	Asn	lle	Thr	Pro	Gln	Leu	Asn	Lys	Asn	Thr	Leu	Lys	Thr	Ser
		675					680					685			
Ala	Ala	Thr	Asp	Val	Trp	Ala	Val	Tyr	Phe	Ser	Gln	Phe	Trp	He	Asp
	690					695					700				
Tyr	Glu	Gly	Met	Lys	Ser	Gly	Lys	Gly	Arg	Pro	He	Ser	Phe	Val	Asp
705					710					715					720
Ser	Phe	Pro	Leu	Ser	lle	Trp	lle	Cys	Gln	Pro	Thr	Arg	Tyr	Ala	Glu
				725					730					735	
Ser	Gln	Lys	Glu	Pro	Gln	Thr	Cys	Asn	Gln	Val	Ser	Leu	Asn	Thr	Ser
			740					745					750		
Gln	Ser	Glu	Ser	Ser	Asp	Leu	Ala	Gly	Arg	Leu	Lys	Arg	Lys	Lys	Leu

			755					760					765			
Le	eu	Lys	Glu	Tyr	Tyr	Ser	Thr	Glu	Ser	Glu	Pro	Leu	Thr	Asn	Gly	Gly
		770					775					780				
G]	ln	Lys	Pro	Ser	Ser	Ser	Asp	Thr	Phe	Phe	Arg	Phe	Ser	Pro	Ser	Ser
78	35					790					795					800
Se	er	Glu	Ala	Asp	Tle	His	Leu	Leu	Val	His	Va]	His	Lys	His	Val	Ser
					805					810					815	
Me	et	Gln	11e	Asn	His	Tyr	Gln	Tyr	Leu	Leu	Leu	Leu	Phe	Leu	His	G1u
				820					825					830		
Se	er	Leu	lle	Leu	Leu	Ser	Glu	Asn	Leu	Arg	Lys	Asp	Val	Glu	Ala	Val
			835					840					845			
Tł	ır	Gly	Ser	Pro	Ala	Ser	Gln	Thr	Ser	Пе	Cys	Пе	Gl y	11e	Leu	Leu
		850					855					860				
Aı	rg	Ser	Ala	Glu	Leu	Ala	Leu	Leu	Leu	His	Pro	Val	Asp	Gln	Λla	Asn
86	35					870					875					880
Tl	ır	Leu	Lys	Ser	Pro	Val	Ser	Glu	Ser	Val	Ser	Pro	Val	Val	Pro	Asp
					885					890					895	
T	yr	Leu	Pro	Thr	Glu	Asn	Gly	Asp	Phe	Leu	Ser	Ser	Lys	Arg	Lys	Gln
				900					905					910		
1.	le	Ser	Arg	Asp	lle	Asn	Arg	lle	Arg	Ser	Val	Thr	Val	Asn	His	Met
			915					920					925			
S	er	Asp	Asn	Arg	Ser	Met	Ser	Va]	Asp	Leu	Ser	His	He	Pro	Leu	Lys
		930					935					940				
Λ:	sp	Pro	Leu	Leu	Phe	Lys	Ser	Ala	Ser	Asp	Thr	Asn	Leu	Gln	Lys	Gly
	15					950					955					960
I	lе	Ser	Phe	Met	Asp	Tyr	Leu	Ser	Asp	Lys	His	Leu	Gly	Lys	He	Ser
					965					970					975	
G	lu	Asp	Glu		Ser	Gly	Leu	Val		Lys	Ser	Gly	Ser		Glu	He
				980					985					990		
G.	lу	Ser		Thr	Ser	Asp	Lys		Asp	Ser	Phe			Asp	Ser	Ser
			995					1000	_				1005			
S			Leu	Asn	Tyr		Glu	Asp	Ser	Asn			Ser	Phe	Asp	Ser
		1010					1015		-	<i>m</i> .		1020	~			
			Asn	GIn			Leu	Ser	Ser			Hhr	Ser	Lys		
)25 	Thu	1.1	Clu		1030	Dh.a	,	A 7		1035	Lau	1	Ď.	C1	1040
		1 10 22	110		V 0.75	110	1/h c	1 11 0	$\alpha \perp c$	4 . 1 1 1	11 cm	1 011	1 011	Line	1 1 1 1 1	11 1 0

Ala Ser Leu Ser Glu Asn Leu Asp Ile Ser Lys Glu Glu Thr Pro Pro Val Arg Thr Leu Lys Ser Gln Ser Ser Leu Ser Gly Lys Pro Lys Glu Arg Cys Pro Pro Asn Leu Ala Pro Leu Cys Val Ser Tyr Lys Asn Met Lys Arg Ser Ser Ser Gln Met Ser Leu Asp Thr 11e Ser Leu Asp Ser Met Ile Leu Glu Glu Gln Leu Leu Glu Ser Asp Gly Ser Asp Ser His Met Phe Leu

<210> 3725

<211> 317

<212> PRT

<213> Homo sapiens

<400> 3725

Met Ser Pro Ser Val Thr Ala Gln Pro Leu Asp Leu Gly Leu Thr lle Thr Pro Glu Pro Thr Thr Glu Val Glu His Ser Thr Pro Leu Lys Lys lle Pro Pro Lys His Pro Lys Val Thr Leu Pro His Pro Asp Gln Val Gln Thr Leu His Ser Asn Leu Thr Gln Val Thr Val Gln Pro Leu Asp Leu Glu Leu Thr Leu Thr Pro Glu Ser Thr Met Glu Val Glu Pro Phe Pro Thr Met Gln Lys Thr Pro Thr Gln Pro Pro Glu Leu Arg Lys Glu Val Val Ala Gln Pro Pro Val Tyr Tyr Glu Thr Ser Met Pro Thr Arg

Gly Gln Asp Gln Ala Gln His Pro Thr Ser Pro Arg Val Thr Val Gln

		115					120					125			
Pro	Leu	Asp	Leu	Gly	Leu	Thr	He	Thr	$\dot{\text{Pro}}$	Glu	Ser	He	Thr	Lys	Val
	130					135					140				
Glu	Pro	Ser	Thr	Ala	Leu	Met	Thr	Thr	Ala	Pro	Pro	Pro	Glu	His	Leu
145					150					155					160
Glu	Val	Thr	Leu	Pro	Pro	Pro	Asp	Lys	G1 y	Gln	Ala	Gln	His	Ser	Asn
				165					170					175	
Leu	Thr	Gln	Val	Thr	Val	Gln	Pro	Leu	Asp	Leu	Glu	Leu	Thr	lle	Thr
			180					185					190		
lle	Glu	Pro	Thr	IJe	Asp	Val	Lys	Pro	Ser	Pro	Thr	Thr	Glu	Glu	Thr
		195					200					205			
Ser	Thr	Gln	Ser	Pro	Asp	Leu	Gly	Leu	Ala	He	Thr	Pro	Glu	Pro	Thr
	210					215					220				
Thr	Glu	He	Gly	Tyr.	Ser	Thr	Ala	Leu	Glu	Lys	Thr	He	Ala	Pro	Arg
225					230					235					240
Pro	Λsp	Gln	Val	Gln	Thr	Gln	His	Arg	Asn	Leu	Thr	Glu	Val	Thr	Gly
				245					250					255	
Pro	Pro	Thr	Glu	Leu	Glu	Pro	Thr	Gln	Asp	Ser	Leu	Val	Gln	Ser	Glu
			260					265					270		
Asn	Tyr	Ala	Gln	Asn	Lys	Ala	Leu	Thr	Ala	Pro	Glu	Glu	Gln	Lys	Ala
		275					280					285			
Ser	Thr	Ser	Thr	Asn	lle	Cys	Asp	Leu	Cys	Thr	Cys	Gly	Asp	Glu	Thr
	290					295					300				
Leu	Ser	Cys	He	Asp	Leu	Ser	Pro	Lys	Gln	Arg	Leu	Arg			
305					310					315					

〈210〉 3726

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3726

Met Ser Gln Gly Leu Leu Gly Ala Phe Cys Phe Leu Phe Trp Val Ser

1 5 10 15

Phe Phe Pro Phe Leu Leu Ser Pro Phe Leu Phe Leu Leu Pro Leu

			20					25					30		
Pro	Leu	Ser	Leu	Phe	Pro	Phe	Leu	Phe	Pro	Phe	Pro	Leu	Ser	Ser	Phe
		35					40					45			
Ser	Ser	Phe	Pro	Ser	Leu	Pro	Phe	Pro	Phe	Phe	Phe	Ser	Phe	Pro	Phe
	50					55					60				
Pro		Asp	Lvs	Val	Pro	Arg	Leu	Λsp	Ala	He	Thr	Ala	His	Cys	Asp
65		•	•		70			·		75					80
	His	Len	Len	Glv	Cys	Ser	Asn	Pro	Pro		Len	Ala	Ser	Glv	Val
				85	-,-				90					95	
Ala	G1v	He	Thr		Ala	Asn	His	His		Trp	Leu	He	Phe		Phe
MIG	01,	110	100	01)	,,,,	пор		105		11 6	200	1.0	110	,	
Pho	Val	Glu		G1 v	Phe	Gln	Pro		Cvs	Pro	G1v	Trn		Gln	Thr
1110	, (1)	115	1,00	01,	, ,,,	0111	120	0,5	0,5	1.10	01,	125	501	0111	• • • •
Pro	Clu		Lve	Ara	Ser	Hic		Pro	Trn	Pro	Pro		Val	Lan	Glv
110	130	Leu	rys	na g	361	135	110	110	11 b	110	140	гуэ	, а1	Leu	013
Lau		110				100					140				
_	Gln	пла													
145															
Z914	J/ 3.	727													
	0> 3°														
	1> 16														
	2> PI														
(21)	3> Ho	omo :	sapre	ens											
Z40	0> 3°	797													
			Dho	нь	Ser	Cly	Lou	Cvc	Sor	Acn	Pho	Thr	Sor	Sor	Gln
	rne	Leu	rne		261	Oly	Leu	Cys	10	nsp	THE	1111	261	15	OIII
Clu	Duo	Low	Lau	5	Dno	Son	Lau	Acn		Dro	Lou	Cvc	Hic		Arc
GLY	L1 O	Lea		GIY	Pro	261	Leu		11 b	110	Leu	Cys	30	261	A. g
C	1	D	20	1	т	Dage	A 1	25	n; a	1	Vat	Ç.,		Aan	Can
ser	Leu		181	Leu	Tyr	110		Leu	mis	Leu	мет		nis	ASII	Sel
EN	ra)	35	DI	DE	C1	TI.	40	C	112	C	17. 1	45	Δ	1	C1
Phe		THE	rne	rne	Glu		GIU	ser	HIS	ser		ser	Arg	Leu	oru
<i>c</i>	50	(1)		1.7	C	55		C			60		D	C.	C
	Asn	Gly	Ala	116	Ser	Ala	HIS	Cys	Asn		Cys	Leu	Pro	61 y	
65					70		_			75					80
Ser	Asp	Ser	Pro	Ala	Ser	Ala	Ser	Gln	Val	Ala	Gly	Thr	Thr	Gly	Val

85 90 95 Cys His His Ala Gln Leu Ile Leu Phe Val Phe Leu Val Lys Thr Gly 105 Phe Cys His Val Gly Gln Ala Arg Leu Glu Leu Leu Thr Ser Ser Asp 115 120 125 Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly Tle Thr Gly Val Ser His 135 140 Arg Thr Arg Pro Cys Gly His 11e Thr Leu Tyr Val Pro Leu Ser Leu 155 160 Pro Arg Leu Leu Ala Ser 165 ⟨210⟩ 3728 <211> 164 <212> PRT <213> Homo sapiens <400> 3728 Met Asn Asn Ser Leu Asp Tyr Leu Ala Tyr Pro Val 11e Val Ser Asn . 10 His Arg Gln Ser Thr Thr Phe Arg Lys Leu Asp Phe Gly His Tyr 25 Val Ser His Lys Asn Arg lle Gln He Ala Lys Pro Thr Val Asp Thr 35 40 45 Lys Pro Pro Val Ala His Thr Asn His Ile Leu Lys Leu Ser Lys Leu 55 Gln Gly Glu Gln Lys Lys lle Asn Lys lle Glu Tyr Glu Asn Lys Gln 70 75 Leu Cys Gln Lys Ile Ala Asn Ala His Arg Gly Pro Ala Lys Val Asp 85 90 95 Cys Trp Asn Glu Tyr Phe Ser Lys Ser Leu Asn Arg Glu Thr Arg Asn 105 Arg Glu Leu Val Arg 11e Thr Met Glu Asn Gln Gly 11e Leu Lys Arg

120

Leu Val Asp Arg Lys Pro His Tyr Asp Arg Arg Ala Ser Glu Ile Asp

125

 130
 135
 140

 Trp Gln Asn Ser Arg Arg Tyr Ile Arg Asn Thr Thr Arg Tyr Leu Leu
 145
 150

 145
 150
 155
 160

 Ser Gln Asn Glu

<210> 3729

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3729

Met Ser His His Ala Lys Pro Lys Pro Gly Val Gln Trp Cys Lys Phe
1 5 10 15

Gln Ser Glu Ser Thr Gly Arg Arg Ala Arg Ser Ala Asp Val Gln Gly
20 25 30

Gln Glu Lys Met Asp Val Thr Ala Gln Glu Ala Arg Thr Asn Leu Pro
35 40 45

Phe Tyr Leu Phe Val Leu Phe Ser Pro Gly Ser Leu Gly Gln Glu Ala 50 55 60

Ala Ala Val Lys Gln Ser His Ile Ser Ala Pro Ala Ser Glu Leu Arg
65 70 75 80

Cys lle Gln Leu Arg Ser Arg Ser Arg Thr Arg Gly Asn Lys Ile Ile 85 90 95

Trp Glu Gln Gly Gln Glu Gly Ala Gly Leu His Gly Arg 100 105

<210> 3730

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3730

Met Asp Pro Ala Ser Val His Pro Pro Lys Leu Cys Pro Pro Pro Phe

lle Phe lle Phe lle Phe lle Phe Met Phe Leu Ser lle Thr Ser Arg Arg Arg Pro Arg Lys Ala Lys Tyr Leu Asp Glu Met Leu Ser Ser Leu Pro Val Arg Leu Gln Pro Asp Ser Asn Ala Ser Ser Arg Val Val Leu Gly Ser Cys Arg Val Arg Glu Pro Leu Lys Arg Trp Pro Arg Gln Ala Trp His Ala Met Ser Pro Pro Gly Ala Glu Phe Arg Ala Asn Ala Leu Cys Lys Cys Leu Asn Ser Ala Asp Lys Gly His Asn Gly Glu Pro Arg Val Ala Pro Gln Ser Cys Pro Val Gly Ala Asn Arg Phe His Gln Gln Ile Leu Arg Thr Pro Glu Gly Thr Leu Arg Met Met Asp Glu Gly Thr Phe Ile Leu Pro Gly Arg Arg Arg Gly Pro <210> 3731 <211> 280 <212> PRT <213> Homo sapiens <400> 3731 Met Thr Ser Leu Thr His Gly Met His Leu Thr Ser Ser Thr Ser Cys Ser Cys Gln Ser Ser Gly Thr Ser Phe Thr Ser Cys Ser Cys Arg Ser Ser Gly Thr Ser Ser Thr Ser Arg Ser Trp Trp Ser Ser Gly Thr Ser Ser Thr Ser Cys Ser Trp Trp Ser Ser Gly Thr Ser Ser Thr Phe Cys

```
Ser Cys Trp Ser Ser Gly Thr Ser Phe Thr Ser Cys Ser Cys Trp Ser
                     70
                                         75
Ser Gly Thr Ser Ser Thr Pro Cys Ser Cys Arg Ser Ser Gly Thr Ser
                                     90
Ser Thr Ser Cys Ser Cys Trp Ser Ser Gly Thr Ser Ser Thr Ser Trp
            100
                                105
Ser Cys Lys Ser Ser Gly Thr Ser Ser Thr Cys Tyr Met Cys Leu Ser
                           120
Ser Gly Thr Ser Ser Thr Ser Tyr Ser Ser Trp Ser Ser Gln Thr Ser
    130
                        135
                                            140
Ser Thr Ser Ser Met Cys Leu Pro Ser Arg Thr Ser Ser Ile Phe Tyr
                    150
                                        155
Ser Cys Leu Pro Leu Gly His His Leu Pro Phe Cys Ser Val Arg Pro
                165
                                    170
Leu Gly Pro Pro Thr Thr Ser Pro Leu Ser Asn Leu Trp lle Leu Ser
            180
                                185
                                                    190
His Pro Phe Tyr Leu Gly Gly Val Trp Pro Leu Asn Asn His Leu His
                            200
Met Asn Leu Leu Gly Tyr Phe Asn Asn Phe His Leu Trp Pro Leu Gly
    210
                        215
Leu Gln Pro Leu Pro Pro Pro Gly Ser Pro Leu Val His Leu Pro Pro
                    230
                                        235
                                                             240
Pro Pro Leu Gly Trp Pro Leu Leu Ser Glu Leu Leu Gln Asp Leu Asn
                245
                                    250
Gln Leu Pro Tyr Pro Leu Leu Pro Val Gly Pro Arg Pro Arg Pro Pro
            260
                                265
                                                    270
His Val Leu Leu Gly 11e Phe 11e
        275
                            280
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<210> 3732

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3732

Met Cys Leu Thr 11e Gln Gly Ala 11e Trp Val Arg Thr Gln Ser Gln Thr lle Ser Leu Ala Asn Glu Glu Thr Glu Ser Glu Arg Ser Ser Asp Val Pro Lys Ser Ala Arg Pro Val Ser Gly Arg Ala Thr Leu Leu Glu Glu Asp Ser Pro Ala Pro His Pro Pro Cys Phe Ser Met Tyr Tyr Val Pro Ala Ser Leu Phe Ala Ala Pro Leu Glu Cys Phe Ser Met Gln Leu Ser Leu Gln Ser Val Val Pro Ala His Gly Leu Pro Ser Ser Arg Arg Gln Asn Arg Gly Lys Pro <210> 3733 <211> 105 <212> PRT <213> Homo sapiens <400> 3733 Met Arg Val Met Leu Thr Phe Phe Ile Pro Lys Pro Ile Arg Ile Arg Phe Ala Asn Ser Ser Gly Lys Asn Gly Arg Lys Gly Ser Pro Leu Lys Ser Arg Leu Phe Tyr Cys Phe Ser Asn lle Lys Asn Lys Gln Leu Gly Glu Val Phe Leu Phe Leu Phe Leu Phe Val Phe Gly Leu Gly Ser Val Gly Gly Arg Gly Leu Ser Lys Trp Cys Ala Arg Lys Ile Asn Thr Gln Leu Thr Tyr Lys His Glu Gly Leu Tyr Gln Gln Lys Phe Lys Val Pro Arg Phe Phe Leu Ile Phe Phe Cys Leu

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<210> 3734
<211> 620
<212> PRT
<213> Homo sapiens
<400> 3734
Met Lys Thr Arg Pro Ser Ser Leu Glu Ser Val Thr Cys Trp Arg Ala
                  5
                                      10
                                                          15
Lys Phe Met Glu Ala Phe Phe Ser His Val Leu Arg Gly Thr Ile Asp
             20
                                 25
Val Ser Ser Asp Arg Arg Leu Cys Asp Gln Arg Phe Ser Pro Leu Leu
                             40
                                                  45
His Ser Ser Arg His Val Arg Gln Leu Thr Ile Cys Asn Met Leu Gln
     50
                         55
                                              60
Gly Ala Thr Glu Leu Val Ala Glu Pro Asn Arg Arg Val Leu Glu Thr
                     70
                                          75
Leu Ala Ser Ser Leu His Thr Leu Lys Phe Arg His Leu Leu Phe Ser
                 85
                                      90
Asp Val Ala Ala Gln Gln Ser Leu Arg Gln Leu Leu His Gln Leu Ile
            100
                                105
His His Gly Ala Val Ser Gln Val Ser Leu Tyr Ser Trp Pro Val Pro
                            120
                                                 125
Glu Ser Ala Leu Phe Ile Leu Ile Leu Thr Met Ser Ala Gly Phe Trp
    130
                        135
                                             140
Gln Pro Gly Pro Gly Gly Pro Pro Cys Arg Leu Cys Gly Glu Ala Ser
                    150
                                        155
Arg Gly Arg Ala Pro Ser Arg Asp Glu Gly Ser Leu Leu Leu Gly Ser
                165
                                     170
                                                         175
Arg Arg Pro Arg Arg Asp Ala Ala Glu Arg Cys Ala Ala Ala Leu Met
                                 185
Ala Ser Arg Arg Lys Ser Glu Ala Lys Gln Met Pro Arg Ala Ala Pro
                            200
                                                 205
```

Ala Thr Arg Val Thr Arg Arg Ser Thr Gln Glu Ser Leu Thr Ala Gly

Gly	Thr	Asp	Leu	Lys	Arg	Glu	Leu	His	Pro	Pro	Ala	Thr	Ser	His	Glu
225					230					235					240
Ala	Pro	Gly	Thr	Lys	Arg	Ser	Pro	Ser	Ala	Pro	Ala	Ala	Thr	Ser	Ser
				245					250					255	
Ala	Ser	Ser	Ser	Thr	Ser	Ser	Tyr	Lys	Arg	Ala	Pro	Ala	Ser	Ser	Ala
			260					265					270		
Pro	Gln	Pro	Lys	Pro	Leu	Lys	Arg	Phe	Lys	Arg	Лlа	Ala	Gly	Lys	Lys
		275					280					285			
Gly	Ala	Arg	Thr	Arg	Gln	Gly	Pro	Gly	Ala	Glu	Ser	Glu	Asp	Leu	Tyr
	290					295					300				
Asp	Phe	Val	Phe	He	Val	Ala	Gly	Glu	Lys	Glu	Asp	Gly	Glu	Glu	Met
305					310					315					320
Glu	He	Gly	Glu	Val	Ala	Cys	Gly	Ala	Leu	Asp	Gly	Ser	Asp	Pro	Ser
				325					330					335	
Cys	Leu	Gly	Leu	Pro	Ala	Leu	Glu	Ala	Ser	Gln	Arg	Phe	Arg	Ser	11e
			340					345					350		
Ser	Thr	Leu	Glu	Leu	Phe	Thr	Val	Pro	Leu	Ser	Thr	Glu	Ala	Ala	Leu
		355					360					365			
Thr	Leu	Cys	His	Leu	Leu	Ser	Ser	Trp	Va1	Ser	Leu	Glu	Ser	Leu	Thr
	370					375					380				
Leu	Ser	Tyr	Asn	G1 y	Leu	Gly	Ser	Asn	lle	Phe	Arg	Leu	Leu	Asp	Ser
385					390					395					400
Leu	Arg	Ala	Leu	Ser	Gly	Gln	Ala	Gly	Cys	Arg	Leu	Arg	Ala	Leu	His
				405					410					415	
Leu	Ser	Asp	Leu	Phe	Ser	Pro	Leu	Pro	lle	Leu	Glu	Leu	Thr	Arg	Ala
			420					425					430		
He	Val	Arg	Ala	Leu	Pro	Leu	Leu	Arg	Val	Leu	Ser	He	Arg	Va}	Asp
		435					440					445			
His		Ser	Gln	Arg	Asp		Pro	Gly	Val	Pro	Gly	Asn	Ala	Gly	Pro
	450					455					460				
Pro	Ser	llis	He	lle		Asp	Glu	Glu	lle		Glu	Asn	Cys	Leu	
465					470					475					480
G1n	Leu	Glu	Met		Phe	Pro	Arg	Gly		Gln	Pro	Ser	Pro		Leu
				485					490					495	
Cys	Ser	Val		Lys	Ala	Ser	Gly		Leu	Gln	Gln	Leu	Ser	Leu	Asp
			500					505					510		

Ser Ala Thr Phe Ala Ser Pro Gln Asp Phe Gly Leu Val Leu Gln Thr 520 Leu Lys Glu Tyr Asn Leu Ala Leu Lys Arg Leu Ser Phe His Asp Met 535 540 Asn Leu Ala Asp Cys Gln Ser Glu Val Leu Phe Leu Leu Gln Asn Leu 545 550 555 Thr Leu Gln Glu 11e Thr Phe Ser Phe Cys Arg Leu Phe Glu Lys Arg 565 570 Pro Ala Gln Phe Leu Pro Glu Met Val Ala Ala Met Lys Gly Asn Ser 580 585 590 Thr Leu Lys Gly Leu Arg Leu Pro Gly Asn Arg Leu Gly Gly Gln 595 600 605 Thr Leu Gly Arg Glu Arg Gly Lys Glu Leu Gly Leu 610 615 620

<210> 3735

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3735

Arg Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser

65 70 75 80

Thr Cys Thr Ala Ser Ala Ser Leu His Leu His Ser Val Ser Leu Ser 85 90 95

Pro Pro Ala Gl
n Arg Leu Gly Ala Ala Val Ser Pro Pro Ala Gl
n Arg 100 105 110

Gln Pro Leu Ser Thr Cys Thr Ala Ser Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser Thr Cys Thr Val Ala Gly Ser Ser Ser Leu Ser Thr Cys Thr Ala Ser Ala Ser Phe His Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln Arg Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser Thr Cys Thr Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser Thr Cys Thr Val Ala Ala Ser Leu His Leu His Ser Gly Trp Glu Gln Gln Pro Leu His Leu His Asn Ser Ser Leu Ser Pro Pro Ala Gln Gln Leu Gly Ala Ala Ser Gln Gly Cys Cys Lys Asp Gly Val Ser Thr Cys Asn Val Arg Thr Ala Pro Ala Thr His Cys Ala Val Cys Arg Ala Val Val Met Val Thr Val Gly Val Thr Gly Gly Arg Glu Leu Arg Asp Ser Ser Gly

<210> 3736

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3736

Met Asn Thr Leu Ile Phe Thr His Leu Cys Ser Leu Glu Pro Ile Thr 1 5 10 15

Met Ser Gln Asn Cys Ala Tyr Leu Val Leu Val Asp Thr Val Leu Gln 20 25 30

Asn Ile Pro Leu Lys Lys Leu Asn Asn Ser Ala Asn Phe Pro Ile Pro 40 45 Ser Leu Pro Val Asp Thr Ile Arg Leu Leu Thr Phe Leu Gln Phe Lys 55 Lys Thr Leu His Met His Ser Tyr Thr Gln Lys Gln Ser Leu Leu Lys 65 70 75 Cys His Leu Leu Asn Glu Val 11e Met 11e Phe Phe Leu Lys Leu Lys 90 Tyr His Pro Pro Gln His Ser Leu Ile Pro Phe Thr Leu Phe Ser Ile 100 105 110 Val Leu Thr Thr Phe Trp His Ala Val Val Ser Leu Leu Ile Leu Asp 120 125 Cys Arg Leu Gln Lys Gly Lys Ser Leu Gly Phe Cys Pro Val Asn Tyr 135 140 Glu Gln Cys Leu Ala Asp Asp Lys Lys Thr His 11e Phe IIe Glu Leu 150 155 160 145 Asn Gly His Gly Asn Cys Arg Ile His Met Asn Phe Ser His Ser Cys 170 Tyr Val Ser Pro Leu Ala His Leu Ser Leu Val 180 185

<210> 3737

<211> 225

<212> PRT

<213> Homo sapiens

<400> 3737

Glu Arg Asp Thr Val Ala Val Ser Ser Leu Val Cys Val Glu Gly Pro Leu Cys Ala Gln Leu Gln Gly Ser Gly Leu Asp Leu Gln Cys Cys Met Gln Asn Thr Lys Pro Arg Thr Lys Glu Pro Gly Thr Val Pro Ala Leu Gly Ala His Gly Leu Leu Ala Ala Ala Gly Gln Leu His Pro Arg Gly Pro Ala Gly Asp Cys Gly Gly Pro Tyr Leu Leu Leu Pro Gly Gly Arg Leu Pro Gln Pro Ala Trp Arg Gln Glu Ala Pro Ala Asp Pro Trp Leu Pro Val Ser Val Glu Ser Pro Pro Ser Leu Ser Pro Pro Ser Glu Gly Ser Pro Pro Met Gly Thr Cys Ala Gly Leu Cys Ser Thr Arg Ala Pro Pro His Arg Lys Leu Leu Leu Asp Val Pro Ala Glu Asp Pro Asn Tyr Leu Pro Leu Pro Glu Glu Gln Pro Gly Pro His Leu Pro Pro Pro Gln Gln <210> 3738 <211> 113 <212> PRT <213> Homo sapiens <400> 3738 Met Glu Asn Thr Leu Tyr IIe Phe Phe Phe Phe Leu Arg Trp Ser Leu

Thr Leu Ser Pro Arg Leu Val Cys Ser Gly Val 11e Ser Ala His Cys

Asn Leu Gln Leu Leu Gly Ser Ser Ala Ser Leu Ala Ser Ala Phe Arg

Val Ala Gly 11e Thr Asp Leu His His His Ala Gln Leu 11e Phe Val Phe Leu Val Glu Thr Gly Phe His His Val Gly Gln Val Gly Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro Ala Ser Val Ser Glu Ser Ala Gly lle Thr Gly Met Ser His Arg Ala Trp Pro Ser Leu Arg lle Phe Ser Trp <210> 3739 <211> 447 <212> PRT <213> Homo sapiens <400> 3739 Met Pro His Val Leu Ile Glu Lys Gly Asp Met Thr Leu Gly Glu Phe Asp Gln Arg Leu Lys Gly Arg Thr Asp Phe lle Lys Gly Met Lys Lys Lys Ser Arg Ala Glu Arg Lys Thr Glu Ile Ile Arg Lys Arg Leu His Lys Asp lle Pro His His Ser Val Ile Met Leu Asn Phe Cys Pro Asp Leu Gln Ser Val Gln Pro Cys Leu Arg Lys Ala His Gly Glu Phe 11e Phe Leu lle Asp Arg Ser Ser Ser Met Ser Gly lle Ser Met His Arg Val Lys Asp Ala Met Leu Val Ala Leu Lys Ser Leu Met Pro Ala Cys Leu Phe Asn 11e 11e Gly Phe Gly Ser Thr Phe Lys Ser Leu Phe Pro

Ser Ser Gln Thr Tyr Ser Glu Asp Ser Leu Ala Met Ala Cys Asp Asp

	130					135					140				
Пе	Gln	Arg	Met	Lys	Ala	Asp	Met	Gly	Gly	Thr	Asn	He	Leu	Ser	Pro
145					150					155					160
Leu	Lys	Trp	Val	11e	Arg	Gln	Pro	Val	His	Arg	Gly	His	Pro	Arg	Leu
				165					170					175	
Leu	Phe	Val	He	Thr	Asp	Gly	Ala	Val	Asn	Asn	Thr	G1 y	Lys	Val	Leu
			180					185					190		
Glu	Leu	Val	Arg	Asn	His	Ala	Phe	Ser	Thr	Arg	Cys	Tyr	Ser	Phe	Gly
		195					200					205			
He	Gly	Pro	Asn	Val	Cys	His	Arg	Leu	Val	Lys	Gly	Leu	Ala	Ser	Val
	210					215					220				
Ser	Glu	Gly	Ser	Ala	Glu	Leu	Leu	Met	Glu	Gly	Glu	Arg	Leu	Gln	Pro
225					230					235					240
Lys	Met	Val	Lys	Ser	Leu	Lys	Lys	Ala	Met	Ala	Pro	Val	Leu	Ser	Asp
				245					250					255	
Val	Thr	Va]	Glu	Trp	11e	Phe	Pro	Glu	Thr	Thr	Glu	Val	Leu	Val	Ser
			260					265					270		
Pro	Val	Ser	Ala	Ser	Ser	Leu	Phe	Pro	Gly	Glu	Arg	Leu	Val	Gly	Tyr
		275					280					285			
G1y	He	Val	Cys	Asp	Ala	Ser	Leu	His	He	Ser	Asn	Pro	Arg	Ser	Asp
	290					295					300				
Lys	Arg	Arg	Arg	Tyr	Ser	Met	Leu	His	Ser	Gln	Glu	Ser	Gly	Ser	Ser
305					310					315					320
Val	Phe	Tyr	llis	Ser	Gln	Asp	Asp	Gly	Pro	G1 y	Leu	Glu	Gly	Gly	Asp
				325					330					335	
Cys	Ala	Lys	Asn	Ser	Gly	Ala	Pro	Phe	lle	Leu	Gly	Gln	Ala	Lys	Asn
			340					345					350		
Ala	Arg	Leu	Ala	Ser	Gly	Asp	Ser	Thr	Thr	Lys	His	Asp	Leu	Asn	Leu
		355					360					365			
Ser		Arg	Arg	Arg	Ala	Tyr	Ser	Thr	Asn	Gln	He	Thr	Asn	His	Lys
	370					375					380				
Pro	Leu	Pro	Arg	Ala	Thr	Met	Ala	Ser	Asp	Pro	Met	Pro	Ala	Ala	Lys
385					390					395					400
Arg	Tyr	Pro	Leu		Lys	Ala	Arg	Leu		Asp	Leu	Thr	Asn		Thr
				405					410					415	
Ser	Leu	Asp	Val	Gln	Arg	Trp	Gln	He	Asp	Leu	Gln	Ala	Phe	Пe	Cys

420 425 430

Leu Thr Ser Glu Asp Thr Phe Gln 11e Arg Thr Pro Thr Gly Gln
435 440 445

<210> 3740

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3740

Met Lys Ala Lys Glu Gly Arg Asn Val Tyr Ser Ser Ser Arg Tyr Asp 1 5 10 15

Asp Tyr Asp Arg Tyr Arg Arg Ser Arg Ser Arg Ser Tyr Glu Arg Arg
20 25 30

Arg Ser Arg Ser Arg Ser Phe Asp Tyr Asn Tyr Arg Arg Ser Tyr Ser 35 40 45

Pro Arg Asn Ser Arg Pro Thr Gly Arg Pro Arg Arg Ser Arg Ser His
50 55 60

Ser Asp Asn Asp Arg Phe Lys His Arg Asn Arg Ser Phe Ser Arg Ser 65 70 75 80

Lys Ser Asn Ser Arg Ser Arg Ser Lys Ser Gln Pro Lys Lys Glu Met 85 90 95

Lys Ala Lys Ser Arg Ser Arg Ser Ala Ser His Thr Lys Thr Arg Gly
100 105 110

Thr Ser Lys Thr Asp Ser Lys Thr His Tyr Lys Ser Gly Ser Arg Tyr
115 120 125

Glu Lys Glu Ser Arg Lys Lys Glu Pro Pro Arg Ser Lys Ser Gln Ser 130 135 140

Arg Ser Gln Ser Arg Ser Arg Ser Lys Ser Arg Ser Arg Ser Trp Thr 145 150 155 160

Ser Pro Lys Ser Ser Gly His

<211> 114 <212> PRT <213> Homo sapiens <400> 3741 Met Ala Gln Gln Gly Glu Gly His His Thr His His Gln Ile Leu Leu 10 Leu Val Ser Gly Phe His 11e Leu Phe Gln 11e Phe Arg Pro Ala His 20 25 Ser Leu Thr Phe Pro Ser Leu Leu His Ser Ser Lys Val Glu Leu Pro 40 Ala Ala Thr Gly lle Ala Ala Lys Trp Glu Arg Ser Arg Val Val Arg 55 Ala Ala Pro Asp Asn Leu Gln Arg Ala Leu Leu Glu Leu Gly Cys Ala 70 75 65 80 Ser Leu Asn Leu Ser Tyr Tyr Met Cys Trp Val Arg Asp His Ala Tyr 85 90 Leu Pro Ala Gln Glu Leu Thr Glu Glu Val Ser Lys Lys Cys Leu Leu 100 105 110 Asp Glu <210> 3742 <211> 274 <212> PRT <213> Homo sapiens <400> 3742 Met Lys Pro Thr Leu Leu Ala Gln Gln Glu Thr Gln Lys Ala Ala Leu 1 Arg Tyr Glu Arg Ala Val Ser Met His Asn Ala Ala Arg Glu Met Val 25 Phe Val Ala Glu Gln Gly Val Met Ala Asp Lys Asn Arg Leu Asp Pro

40 Thr Trp Gln Glu Met Leu Asn His Ala Thr Cys Lys Val Asn Glu Ala

45

	50					55					60				
Glu	Glu	Glu	Arg	Leu	Arg	Gly	Glu	Arg	Glu	His	Gln	Arg	Val	Thr	Arg
65					70					75					80
Leu	Cys	Gln	Gln	Ala	Glu	Ala	Arg	Va]	Gln	Ala	Leu	Gln	Lys	Thr	Leu
				85					90					95	
Arg	Arg	Ala	He	Gly	Lys	Ser	Arg	Pro	Tyr	Phe	Glu	Leu	Lys	Ala	Gln
			100					105					110		
Phe	Ser	Gln	Ile	Leu	Glu	61u	His	Lys	Ala	Lys	Val	Thr	Glu	Leu	Glu
		115					120					125			
Gln	Gln	Val	Ala	Gln	Ala	Lys	Thr	Arg	Tyr	Ser	Val	Ala	Leu	Arg	Asn
	130					135					140				
Leu	Glu	Gln	He	Ser	Glu	Gln	He	His	Ala	Arg	Arg	Arg	G1y	Gly	Leu
145					150					155					160
Pro	Pro	llis	Pro	Leu	Gly	Pro	Arg	Arg	Ser	Ser	Pro	Va]	Gly	Ala	Glu
				165					170					175	
Λla	Gly	Pro	Glu	Asp	Met	Glu	Asp	Gly	Asp	Ser	Gly	11e	Glu	Gly	Ala
			180					185					190		
Glu	Gly	Ala	Gly	Leu	Glu	Glu	Gly	Ser	Ser	Leu	Gly	Pro	Gly	Pro	Ala
		195					200					205			
Pro	Asp	Thr	Asp	Thr	Leu	Ser	Leu	Leu	Ser	Leu	Arg	Thr	Val	Ala	Ser
	210					215					220				
Asp	Leu	Gln	Lys	Cys	Asp	Ser	Val	Glu	His	Leu	Arg	Gly	Leu	Ser	Asp
225					230					235					240
His	Val	Ser	Leu	Asp	Gly	Gln	Glu	Leu	Gly	Thr	Arg	Ser	Gly	Gly	Arg
				245					250					255	
Arg	Gly	Ser	Asp	Gly	Gly	Ala	Arg	Gly	Gly	Arg	His	Gln	Arg	Ser	Val
		•	260					265					270		

<210> 3743

Ser Leu

<211> 1085

<212> PRT

<213> Homo sapiens

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1				5					10					15	
Pro	Trp	Thr	Phe	Tyr	Cys	Gln	Leu	Ala	Λrg	Asn	Ala	Asn	Пе	Leu	Głu
			20					25					30		
Glu	Leu	Ser	Cys	Ser	He	Thr	Gln	Leu	Ser	Lys	Val	Leu	Leu	Asn	Leu
		35					40					45			
Lys	Thr	Ser	Pro	Leu	Asn	Pro	Gly	Thr	Leu	Cys	Leu	Ala	Lys	Tyr	Thr
	50					55					60				
Asp	Gly	Asn	Trp	Tyr	Arg	Gly	Πe	Val	He	Glu	Lys	Glu	Pro	Lys	Lys
65					70					75					80
Val	Phe	Phe	Val	Asp	Phe	Gly	Asn	lle	Tyr	Val	Val	Thr	Ser	Asp	Asp
				85					90					95	
Leu	Leu	Pro	lle	Pro	Ser	Asp	Ala	Tyr	Asp	Val	Leu	Leu	Leu	Pro	Met
			100					105					110		
Gln	Ala	Val	Arg	Cys	Ser	Leu	Ser	Asp	lle	Pro	Asp	His	He	Pro	Glu
		115					120					125			
Glu	Val	Va]	Val	Trp	Phe	Gln	Glu	Thr	lle	Leu	Asp	Lys	Ser	Leu	Lys
	130					135					140				
Ala	Leu	Val	Val	Ala	Lys	Asp	Pro	Asp	Gly	Thr	Leu	He	He	Glu	Leu
145					150					155					160
Tyr	Gly	Asp	Asn	lle	Gln	He	Ser	Ala	Ser	11e	Asn	Lys	Lys	Leu	Gly
				165					170					175	
Leu	Leu	Ser	Tyr	Lys	Asp	Arg	He	Arg	Lys	Lys	Glu	Ser	Glu	Val	Leu
			180					185					190		
Cys	Ser	Thr	Thr	Glu	Thr	Leu	Glu	Glu	Lys	Asn	Glu	Asn	Met	Lys	Leu
		195					200					205			
Pro	Cys	Thr	Glu	Tyr	Leu	Ser	Lys	Ser	Val	G1 y	Tyr	Lys	Leu	Pro	Asn
	210					215					220				
Lys	Glu	He	Leu	Glu	Glu	Ser	Tyr	Lys	Pro	Gln	Пе	Asn	Ser	Ser	Tyr
225					230					235					240
Lys	Glu	Leu	Lys	Leu	Leu	Gln	Ser	Leu	Thr	Lys	Thr	Asn	Leu	Val	Thr
				245					250					255	
GIn	Tyr	Gln	Asp	Ser	Val	Gly	Asn	Lys	Asn	Ser	Gln	Val	Phe	Pro	Leu
			260					265					270		
Thr	Thr	Glu	Lys	Lys	Glu	Glu	lle	Ser	Ala	Glu	Thr	Pro	Leu	Lys	Thr

		275					280					285			
Ala	Arg	Val	Glu	Ala	Thr	Leu	Ser	Glu	Arg	Lys	Пe	Gly	Asp	Ser	Cys
	290					295					300				
Asp	Lys	Asp	Leu	Pro	Leu	Lys	Phe	Cys	Glu	Phe	Pro	Gln	Lys	Thr	He
305					310					315					320
Met	Pro	Gly	Phe	Lys	Thr	Thr	Val	Tyr	Va]	Ser	His	He	Asn	Asp	Leu
				325					330					335	
Ser	Asp	Phe	Tyr	Val	Gln	Leu	11e	Glu	Asp	Glu	Ala	G]u	He	Ser	His
			340					345					350		
Leu	Ser	Glu	Arg	Leu	Asn	Ser	Val	Lys	Thr	Arg	Pro	Glu	Tyr	Tyr	Val
		355					360					365			
Gly	Pro	Pro	Leu	G] n	Arg	Gly	Asp	Met	He	Cys	Ala	Val	Phe	Pro	Glu
	370					375					380				
Лѕр	Asn	Leu	Trp	Tyr	Arg	Ala	Val	Пe	Lys	Glu	GIn	Gln	Pro	Asn	Asp
385					390					395					400
Leu	Leu	Ser	Val	Gln	Phe	lle	Asp	Tyr	Gly	Asn	Val	Ser	Va]	Val	His
				405					410					415	
Thr	Asn	Lys	lle	Gly	Arg	Leu	Asp	Leu	Val	Asn	Ala	He	Leu	Pro	Gly
			420					425					430		
Leu	Cys	lle	His	Cys	Ser	Leu	Gln	Gly	Phe	Glu	Val	Pro	Asp	Asn	Lys
							440					445			
		435													
	Ser		Lys	Met	Met	His	Tyr	Phe	Ser	Gln	Arg	Thr	Ser	Glu	Ala
	Ser 450		Lys	Met	Met	His 455	Tyr	Phe	Ser	Gln	Arg 460	Thr	Ser	Glu	Ala
Asn	450	Lys				455				Gln Asp	460				
Asn	450	Lys				455					460				
Asn Ala 465	450 11e	Lys Arg	Cys	Glu	Phe 470	455 Val	Lys	Phe	Gln	Asp	460 Arg	Trp	Glu	Val	11e 480
Asn Ala 465	450 11e	Lys Arg	Cys	Glu	Phe 470	455 Val	Lys	Phe	Gln	Asp 475	460 Arg	Trp	Glu	Val	11e 480
Asn Ala 465 Leu	450 lle Ala	Lys Arg Asp	Cys Glu	Glu Ilis 485	Phe 470 Gly	455 Val lle	Lys 11e	Phe Ala	Gln Asp 490	Asp 475	460 Arg Met	Trp lle	Glu Ser Val	Val Arg 495	11e 480 Tyr
Asn Ala 465 Leu	450 lle Ala	Lys Arg Asp	Cys Glu	Glu Ilis 485	Phe 470 Gly	455 Val lle	Lys 11e	Phe Ala	Gln Asp 490	Asp 475 Asp	460 Arg Met	Trp lle	Glu Ser	Val Arg 495	11e 480 Tyr
Asn Ala 465 Leu Ala	450 11e Ala Leu	Lys Arg Asp Ser	Cys Glu Glu 500	Glu Ilis 485 Lys	Phe 470 Gly Ser	455 Val 11e Gln	Lys Ile Val	Phe Ala Glu 505	GIn Asp 490 Leu	Asp 475 Asp	460 Arg Met	Trp lle Gln Asp	Glu Ser Val 510	Val Arg 495 11e	11e 480 Tyr Lys
Asn Ala 465 Leu Ala	450 11e Ala Leu	Lys Arg Asp Ser	Cys Glu Glu 500	Glu Ilis 485 Lys	Phe 470 Gly Ser	455 Val 11e Gln	Lys Ile Val	Phe Ala Glu 505	GIn Asp 490 Leu	Asp 475 Asp Ser	460 Arg Met	Trp lle Gln	Glu Ser Val 510	Val Arg 495 11e	11e 480 Tyr Lys
Asn Ala 465 Leu Ala Ser	450 lle Ala Leu Ala	Arg Asp Ser Ser 515	Cys Glu Glu 500 Ser	Glu His 485 Lys	Phe 470 Gly Ser	455 Val lle Gln Val	Lys 11e Val Asn 520	Phe Ala Glu 505 Lys	GIn Asp 490 Leu Ser	Asp 475 Asp Ser	460 Arg Met Thr	Trp He Gln Asp 525	Glu Ser Val 510 Thr	Val Arg 495 Ile Ser	11e 480 Tyr Lys Val
Asn Ala 465 Leu Ala Ser	450 1le Ala Leu Ala Leu 530	Arg Asp Ser Ser 515 Asn	Cys Glu Glu 500 Ser Trp	Glu His 485 Lys Lys	Phe 470 Gly Ser Ser	455 Val 11e Gln Val Pro 535	Lys Ile Val Asn 520 Glu	Phe Ala Glu 505 Lys	GIn Asp 490 Leu Ser	Asp 475 Asp Ser Asp	460 Λrg Met Thr 11e 11e 540	Trp He Gln Asp 525 Arg	Glu Ser Val 510 Thr	Val Arg 495 Ile Ser	11e 480 Tyr Lys Val
Asn Ala 465 Leu Ala Ser	450 1le Ala Leu Ala Leu 530	Arg Asp Ser Ser 515 Asn	Cys Glu Glu 500 Ser Trp	Glu His 485 Lys Lys	Phe 470 Gly Ser Ser	455 Val 11e Gln Val Pro 535	Lys Ile Val Asn 520 Glu	Phe Ala Glu 505 Lys	GIn Asp 490 Leu Ser	Asp 475 Asp Ser	460 Λrg Met Thr 11e 11e 540	Trp He Gln Asp 525 Arg	Glu Ser Val 510 Thr	Val Arg 495 Ile Ser	11e 480 Tyr Lys Val
Asn Ala 465 Leu Ala Ser Phe Thr 545	Ala Leu Ala Leu S30 Val	Arg Asp Ser Ser 515 Asn	Cys Glu Glu 500 Ser Trp Asp	Glu His 485 Lys Lys Tyr	Phe 470 Gly Ser Ser Asn Pro 550	455 Val 11e Gln Val Pro 535 Glu	Lys He Val Asn 520 Glu Tyr	Phe Ala Glu 505 Lys Lys	GIn Asp 490 Leu Ser Lys	Asp 475 Asp Ser Asp	460 Arg Met Thr 11e 540 Gln	Trp He Gln Asp 525 Arg	Glu Ser Val 510 Thr Ala	Val Arg 495 Ile Ser Tyr	11e 480 Tyr Lys Val Ala Thr 560

				565					570					575	
Val	Ala	Asp	Arg	Arg	Asn	Cys	He	Pro	Cys	Pro	Tyr	He	Gly	Asp	Pro
			580					585					590		
Cys	Ile	Val	Arg	Tyr	Arg	Glu	Asp	Gly	His	Tyr	Tyr	Arg	Ala	Leu	He
		595					600					605			
Thr	Asn	He	Cys	Glu	Asp	Tyr	Leu	Val	Ser	Val	Arg	Leu	Val	Asp	Phe
	610					615					620				
Gly	Asn	He	Glu	Asp	Cys	Val	Asp	Pro	Lys	Ala	Leu	Trp	Ala	He	Pro
625					630					635					640
Ser	Glu	Leu	Leu	Ser	Val	Pro	Met	Gln	Ala	Phe	Pro	Cys	Cys	Leu	Ser
				645					650					655	
Gly	Phe	Asn	lle	Ser	Glu	Gly	Leu	Cys	Ser	Gln	Glu	Gly	Asn	Asp	Tyr
			660					665					670		
Phe	Tyr	Glu	He	11e	Thr	Glu	Asp	Val	Leu	Glu	He	Thr	He	Leu	Glu
		675					680					685			
He	Arg	Arg	Asp	Val	Cys	Asp	lle	Pro	Leu	Ala	lle	Val	Asp	Leu	Lys
	690					695					700				
Ser	Lys	Gly	Lys	Ser	Ile	Asn	Glu	Lys	Met	Glu	Lys	Tyr	Ser	Lys	Thr
705					710					715					720
Gly	Ile	Lys	Ser	Ala	Leu	Pro	Tyr	Glu	Asn	lle	Asp	Ser	Glu	lle	Lys
				725					730					735	
Gln	Thr	Leu	Gly	Ser	Tyr	Asn	Leu	Asp	Va]	G1 y	Leu	Lys	Lys	Leu	Ser
			740					745					750		
Asn	Lys	Λla	Val	Gln	Asn	Lys	He	Tyr	Met	Glu	Gln	Gln	Thr	Asp	Glu
		755					760					765			
Leu	Ala	Glu	lle	Thr	Glu	Lys	Asp	Va]	Asn	lle	lle	Gly	Thr	Lys	Pro
	770					775					780				
	Asn	Phe	Arg	Asp		Lys	Thr	Asp	Asn		Cys	Glu	G1 y	Phe	
785					790					795					800
Asn	Pro	Cys	Lys		Lys	lle	Asp	Thr		Glu	Leu	Glu	Gly		Leu
				805					810					815	
Glu	Cys	His	Leu	Val	Asp	Lys	Ala		Phe	Asp	Asp	Lys		Leu	He
···	a :	15.	820	···		,	**	825			٥.		830		
Thr	Gly		Asn	Thr	Leu	Leu		His	Ala	Asn	Glu		Lys	Glu	He
	C1	835		C	,		840	D		C	15	845	4	6.1	C
Len	Gin	1.611	Asn	Sor	Len	(, 1)	Val	Pro	Leu	Ser	Pro	Asn	Acn	(. 11	Ser

	850					855					860				
Lys	Glu	Phe	Leu	Glu	Leu	Glu	Ser	Пе	Glu	Leu	Gln	Asn	Ser	Leu	Val
865					870					875					880
Val	Asp	Glu	Glu	Lys	Gly	Glu	Leu	Ser	Pro	Val	Pro	Pro	Asn	Va]	Pro
				885					890					895	
Leu	Ser	Gln	Glu	Cys	Val	Thr	Lys	Gly	Ala	Met	Gľu	Leu	Phe	Thr	Leu
			900					905					910		
Gln	Leu	Pro	Leu	Ser	Cys	Glu	Ala	Glu	Lys	Gln	Pro	Glu	Leu	Glu	Leu
		915					920					925			
Pro	Thr	Ala	Gln	Leu	Pro	Leu	Asp	Asp	Lys	Met	Asp	Pro	Leu	Ser	Leu
	930					935					940				
Gly	Val	Ser	Gln	Lys	Ala	Gln	Glu	Ser	Met	Cys	Thr	Glu	Asp	Met	Arg
945					950					955					960
Lys	Ser	Ser	Cys	Val	Glu	Ser	Phe	Asp	Asp	Gln	Arg	Arg	Met	Ser	Leu
				965					970					975	
His	Leu	His	Gly	Ala	Asp	Cys	Asp	Pro	Lys	Thr	Gln	Asn	Glu	Met	Asn
			980					985					990		
He	Cys	Glu	Glu	Glu	Phe	Val	Glu	Tyr	Lys	Asn	Arg	Asp	Ala	He	Ser
		995					1000					1005			
Ala	Leu	Met	Pro	Leu	Phe	Ser	Glu	Glu	Glu	Ser	Ser	Asp	Gly	Ser	Ļys
]	1010					1015					1020				
His	Asn	Λsn	Gly	Leu	Pro	Asp	His	lle	Ser	Ala	Gln	Leu	Gln	Asn	Thr
1025	5				1030					1035				Ī	1040
Tyr	Thr	Leu	Lys	Ala	Phe	Thr	Val	Gly	Ser	Lys	Cys	Val	Val	Trp	Ser
				1045				-	1050					1055	
Ser	Leu	Arg	Asn	Thr	Trp	Ser	Lys	Cys	Glu	lle	Leu	Glu	Thr	Ala	Glu
			1060					1065					1070		
Glu	Gly	Thr	Arg	Lys	Arg	Gly	Leu	Glu	Val	Met	Glu	He			
		1075					1080				,	1085			

<210> 3744

<211> 1060

<212> PRT

<213> Homo sapiens

<400)> 37	744													
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Leu	Glu	Gln	Arg	Leu	His	GIn	Pro	Gln	Lys	Leu	Leu	Glu	Asp	Leu	Arg
			20					25					30		
Lys	Thr	Asp	Ala	Gln	Gln	Phe	Arg	Thr	Ala	Met	Lys	Cys	Leu	Leu	Glu
		35					40					45			
Asp	Lys	Lys	Asp	Gly	Leu	Asp	Leu	Lys	Asp	lle	He	lle	Asp	Leu	Gly
	50					55					60				
Glu	Ile	Arg	Glu	Arg	Ala	Leu	Gln	Ser	Pro	Gly	Val	Asn	Arg	Ser	Leu
65					70					75					80
Phe	Leu	He	Thr	Leu	Glu	Arg	Cys	Phe	Gln	Met	Leu	Asn	Ser	Leu	Glu
				85					90					95	
Cys	Val	Glu	He	Leu	Gly	Lys	Val	Leu	Arg	Gly	Ser	Ser	Gly	Ser	Phe
			100					105					110		
Leu	Glņ		Asp	He	Thr	Glu		Leu	Pro	Arg	Asp		Arg	Glu	Asp
		115					120					125			
Ala		Lys	Asn	Leu	Ser		Va]	Phe	Lys	Asp		Tyr	Asp	Lys	Thr
	130		_			135		_			140		. .		
	Ala	His	Ser	GIn		Ala	Leu	Tyr	Ser		Met	Thr	Gly	He	
145	m.				150	m.				155	C	T	v. 1	C	160
Gln	Thr	Ser	Ser		Ala	Thr	Asp	Asp		Ala	Ser	Trp	Val		Ala
C.1		1	т	165	,	C1	Α	т	170	V . 1	112.5		C	175	C1
GIU	HIS	Leu		vai	Leu	GIY	Arg		Me t	vaı	HIS	Leu	Ser	rne	61u
C1	116	Thu	180	110	San	Dro	110	185	110	Clv	Lou	Dho	190	Sor	Tur
Giu	116	195		116	261	L10	200		116	GIŸ	Leu	205	He	361	1 7 1
Aen	Aen			lve	Gln	Leu			Val	Tyr	Asn		Thr	Pro	Glu
лэр	210	MIG	1 (11	Lys	0111	215	пэр	MC C	, (1)	131	220	110	1111	110	Old
Leu		Gln	Ala	Phe	Leu		Arø	He	Ser	Ser		Asn	Phe	Asn	Met
225		01			230		6			235					240
	Asn	Thr	Ser	Thr		His	Arg	Leu	Glv		Leu	Val	Cys	Phe	
6				245					250				٠	255	
Asn	Asp	Leu	Glu		Leu	Asp	Ala	Thr		Ala	Gln	Val	Leu		Tyr
	•		260			•		265					270		
Gln	Met	He	Lys	Cys	Ser	His	Leu	Arg	Gly	Phe	Gln	Ala	Gly	Val	G1n

		275					280					285			
Lys	Leu	Lys	Ala	Glu	Leu	Leu	Asp	Пе	Ala	Met	Glu	Asn	Gln	Thr	Leu
	290					295					300				
Asn	Glu	Thr	Leu	Gly	Ser	Leu	Ser	Asp	Ala	Val	Val	Gly	Leu	Thr	Tyr
305					310					315					320
Ser	G]n	Leu	Glu	Ser	Leu	Ser	Pro	G]u	Ala	Val	His	Gly	Ala	11e	Ser
				325					330					335	
Thr	Leu	Λsn	Gln	Val	Ser	G] y	Trp	Ala	Lys	Ser	Gln	Val	He	Пе	Leu
			340					345					350		
Ser	Ala	Lys	Tyr	Leu	Ala	His	Glu	Lys	Val	Leu	Ser	Phe	Tyr	Asn	Val
		355					360					365			
Ser	Gln	Met	Gly	Ala	Leu	Leu	Ala	G1 y	Va]	Ser	Thr	Gln	Ala	Phe	Cys
	370					375					380				
Ser	Met	Lys	Arg	Lys	Asp	He	Ser	G]n	Val	Leu	Arg	Ser	Ala	Val	Ser
385					390					395					400
Gln	Tyr	Val	Ser	Asp	Leu	Ser	Pro	Ala	Gln	Gln	Gln	Gly	He	Leu	Ser
				405					410					415	
Lys	Met	Val	Gln	Ala	Glu	Asp	Thr	Ala	Pro	Gly	He	Val	Glu	lle	Glr
			420					425					430		
Gly	Ala	Phe	Phe	Lys	Glu	Val	Ser	Leu	Phe	Asp	Leu	Arg	Arg	Gln	Pro
		435					440					445			
Gly	Phe	Asn	Ser	Thr	Val	Leu	Lys	Asp	Lys	Glu	Leu	Gly	Arg	Ser	Glr
	450					455					460				
Ala	Leu	Phe	Leu	Tyr	Glu	Leu	Leu	Leu	Lys	Thr	Thr	Arg	Arg	Pro	Glu
465					470					475					480
Glu	Leu	Leu	Ser	Ala	Gly	Gln	Leu	Val	Lys	Gly	Val	Thr	Cys	Ser	His
				485					490					495	
He	Asp	Ala	Met	Ser	Thr	Asp	Phe	Phe	Leu	Ala	His	Phe	Gln	Asp	Ph€
			500					505					510		
Gln	Asn	Asn	Phe	Ala	Leu	Leu	Ser	Pro	Tyr	GIn	Val	Asn	Cys	Leu	Ala
		515					520					525			
Trp	Lys	Tyr	Trp	Glu	Val	Ser	Arg	Leu	Ser	Met	Pro	Pro	Phe	Leu	Lei
	530					535					540				
Ala	Ala	Leu	Pro	Ala	Arg	Tyr	Leu	Ala	Ser	Val	Pro	Ala	Ser	Gln	Cys
545					550					555					560

Val	Pro	Phe	Leu	He	Ser	Leu	Gly	Lys	Ser	Trp	Leu	Asp	Ser	Leu	Val
				565					570					575	
Leu	Asp	Ser	His	Lys	Lys	Thr	Ser	Val	Leu	Arg	Lys	Val	Gln	G1n	Cys
			580					585					590		
Leu	Asp	Asp	Ser	He	Ala	Asp	Glu	Tyr	Thr	Val	Лѕр	He	Met	Gly	Asn
		595					600					605			
Leu	Leu	Cys	His	Leu	Pro	Аlа	Ala	Пе	11e	Asp	Arg	Gly	lle	Ser	Pro
	610					615					620				
Arg	Ala	Trp	Λla	Thr	Ala	Leu	His	Gly	Leu	Arg	Asp	Cys	Pro	Asp	Leu
625					630					635					640
Asn	Pro	Glu	Gln	Lys	Ala	Ala	Val	Arg	Leu	Lys	Leu	Leu	Gly	Gln	Tyr
				645					650					655	
Gly	Leu	Pro	Gln	His	Trp	Thr	Ala	Glu	Thr	Thr	Lys	Asp	Leu	Gly	Pro
			660					665					670		
Phe	Leu	Val	Leu	Phe	Ser	G1 y	Asp	Glu	Leu	Ser	Ser	He	Ala	Thr	Lys
		675					680					685			
Phe	Pro	Glu	lle	Leu	Leu	Gln	Ala	Ala	Ser	Lys	Met	Ala	Arg	Thr	Leu
	690					695					700			•	
Pro	Thr	Lys	Glu	Phe	Leu	Trp	Ala	Val	Phe	Gln	Ser	Val	Arg	Asn	Ser
705					710					715					720
Ser	Asp	Lys	He	Pro	Ser	Tyr	Asp	Pro	Met	Pro	$\operatorname{Gl} y$	Cys	His	Gly	Val
				725					730					735	
Val	Ala	Pro	Ser	Ser	Asp	Asp	Пе	Phe	Lys	Leu	Ala	Glu	Ala	Asn	Ala
			740					745					750		
Cys	Trp	Ala	Leu	Glu	Asp	Leu	Arg	Cys	Met	Glu	Glu	Asp	Thr	Phe	11e
		755					760					765			
Arg	Thr	Val	Glu	Leu	Leu	Gly	Ala	Val	Gln	Gly	Phe	Ser	Arg	Pro	Gln
	770					775					780				
Leu	Met	Thr	Leu	Lys	Glu	Lys	Ala	He	Gln	Va]	Trp	Asp	Met	Pro	Ser
785					790					795					800
Tyr	Trp	Arg	Glu	His	His	11e	Val	Ser	Leu	Gly	Arg	lle	Ala	Leu	Ala
				805					810					815	
Leu	Asn	Glu	Ser	Glu	Leu	Glu	Gln	Leu	Asp	Leu	Ser	Ser	He	Asp	Thr
			820					825					830		
Val	Ala	Ser	Leu	Ser	Trp	Gln	Thr	Glu	Trp	Thr	Pro	Gly	Gln	Ala	Glu
		835					840					845			

Ser Ile Leu Gln Gly Tyr Leu Asp Asp Ser Gly Tyr Ser Ile Gln Asp Leu Lys Ser Phe His Leu Val Gly Leu Gly Ala Thr Leu Cys Ala Ile Asn lle Thr Glu Ile Pro Leu Ile Lys lle Ser Glu Phe Arg Val Val Val Ala Arg Ile Gly Thr Leu Leu Cys Ser Thr His Val Leu Ala Glu Phe Lys Arg Lys Ala Glu Val Val Phe Gly Asp Pro Thr Glu Trp Thr Ser Ser Val Leu Gln Glu Leu Gly Thr Ile Ala Ala Gly Leu Thr Lys Ala Glu Leu Arg Met Leu Asp Lys Asp Leu Met Pro Tyr Phe Gln Pro Ser Ala 11e Lys Cys Leu Pro Asp Glu 11e Phe Lys Glu Leu Ser Ala Glu Gln Ile Ala Ser Leu Gly Pro Glu Asn Ala Ala Ala Val Thr His Ala Gln Arg Arg Leu Ser Pro Leu Gln Leu Gln Ser Leu Gln Gln Ala Leu Asp Gly Ala Lys Thr His Ser Trp Gln Asp Ala Pro Ala Ser Ala Gly Pro Thr Arg Thr Ser Ser Ser Arg Ser Pro Ala Gly Ala Leu Gln Ser Trp Gly Leu Trp Leu Gly Cys Pro Leu Leu Val Leu Met Ala Lys Leu Leu Trp

<210> 3745

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3745

Met Gly Lys Asn Val Ser Lys Ala Val Glu His Ile Asn Lys Thr Ile 10 Glu Pro Ala Leu Ile Ser Lys His Leu Asn Val Ile Glu Gln Lys Arg 25 30 Ile Asp Lys Leu Met Ile Glu Thr Val Asp Pro Asp Asn Arg Ser Lys 35 40 45 Phe Gly Val Asn Ile Ile Leu Gly Ile Ser Phe Ala Val Cys Lys Ala 55 Gly Ala Ala Glu Lys Gly Phe Ser Leu Leu Ser Gln Asn Cys Glu Phe 65 70 75 Ala Gly Asn Ser Glu Gly 11e Leu Leu Val Pro Ala Phe Thr Val Thr 90 85 Ser Asn Gly Ser Gln Ser Gly Asn Lys Leu Ala Val 100 105 .

<210> 3746

<211> 1557

<212> PRT

<213> Homo sapiens

<400> 3746

Met Gln Asn Ile Pro Phe Pro Ser Pro Gln Arg Pro Arg Ile Leu Val 1 5 10 15

Gln Leu Ser Val His Asp Ala Leu lle Leu Ser Gln Pro Val Ser Thr 20 25 30

Pro Leu Pro Leu Ser Gly Ala Asn Phe Ser Thr Leu Leu Met Asn Leu 35 40 45

Gly Pro Glu Asn Cys Ala Thr Leu Leu Leu Phe Val Leu Leu Glu Ser 50 55 60

Lys lle Leu Leu His Ser Leu Arg Pro Ala Val Leu Thr Gly Val Ala 65 70 75 80

Glu Ala Val Val Ala Met lle Phe Pro Phe Gln Trp Gln Cys Pro Tyr 85 90 95

lle Pro Leu Cys Pro Leu Ser Leu Ala Ala Val Leu Ser Ala Pro Leu 100 105 110

Pro	Phe	lle	Val	Gly	Val	Asp	Ser	Arg	Tyr	Phe	Asp	Leu	His	Asp	Pro
		115					120					125			
Pro	Gln	Asp	Val	Val	Cys	lle	Asp	Leu	Asp	Thr	Asn	Met	Leu	Tyr	Val
	130					135					140				
Ser	Asp	Glu	Lys	Lys	Asn	Met	Asn	Trp	Lys	Gln	Leu	Pro	Lys	Lys	Pro
145					150					155					160
Cys	Lys	Asn	Leu	Leu	Ser	Thr	Leu	Lys	Lys	Leu	Tyr	Pro	Gln	Leu	Ser
				165					170	,				175	
Ser	Val	llis	Gln	Lys	Thr	Gln	Glu	Gly	Ser	Ala	lle	Asp	Met	Thr	Pro
			180					185					190		
He	Glu	Ala	Asp	Phe	Ser	Trp	Gln	Lys	Lys	Met	Thr	Gln	Leu	Glu	Met
		195					200					205			
Glu	He	Gln	Glu	Ala	Phe	Leu	Arg	Phe	Met	Ala	Ser	11e	Leu	Lys	Gly
	210					215					220				
Tyr	Arg	Thr	Tyr	Leu	Arg	Pro	He	Thr	Glu	Ala	Pro	Ser	Asn	Lys	Ala
225					230					235					240
Thr	Ala	Ala	Asp	Ser	Leu	Phe	Asp	Arg	Gln	Gly	Phe	Leu	Lys	Ser	Arg
				245					250					255	
Asp	Arg	Ala	Tyr	Ala	Lys	Phe	Tyr	Thr	Leu	Leu	Ser	Lys	Thr	Gln	lle
			260					265					270		
Phe	He	Arg	Phe	He	Glu	Glu	Cys	Ser	Phe	Val	Ser	Asp	Lys	Asp	Thr
		275					280					285			
Gly	Leu	Ala	Phe	Phe	Asp	Asp	Cys	Пe	Glu	Lys	Leu	Phe	Pro	Asp	Lys
	290					295					300				
Gly	Thr	Glu	Lys	Thr	Asp	Lys	Val	Asp	Phe	Asp	Ser	Ala	Glu	Asp	Thr
305					310					315					320
Arg	Leu	lle	Glu	Leu	Asp	Asp	Ser	Gln	Lys	Gly	Glu	His	Thr	Val	Phe
				325					330					335	
He	Met	Pro	Pro	Glu	Pro	Pro	Pro	Asp	Asp	Gly	Lys	Asp	Leu	Ser	Pro
			340					345					350		
Lys	Tyr	Ser	Tyr	Lys	Tyr	Phe	Pro	Arg	Leu	Asp	Leu	Lys	Leu	Phe	Asp
		355					360					365			
Arg		Gln	Glu	Leu	Lys		Cys	Phe	Ser	Arg		Pro	Thr	Gly	Asn
	370					375					380				
	lle	Thr	Lys	Ser		Pro	Leu	Met	Ala		Arg	Thr	Lys	Gln	
385					390					395					400

Second Residue	He	Lys	Thr	Ala	His	Lys	Leu	Ala	Lys	Arg	Cys	Tyr	Thr	Asn	Pro	Pro
Cys					405					410					415	
Cys Leu Pro Ala Tyr Val 440	Gln	Trp	Λ1а	Lys	Cys	Leu	Phe	Ser	His	Cys	Tyr	Ser	Leu	Trp	Phe	Tle
Hat				420					425					430		
Mathematical Mat	Cys	Leu	Pro	Ala	Tyr	Val	Arg	Val	Ser	His	Pro	Lys	Val	Arg	Ala	Leu
Hat			435					440					445			
Pro Leu Asp Glu Val Cys Tyr Arg Val Val Leu Cys Tyr Arg Val Arg Val Leu Ala Val Arg Val Leu Pro Ala Val Arg Val Leu Pro Ala Val Arg Val Leu Pro Arg Val Arg Tyr Tyr Arg Lys Tyr Arg Arg Lys Arg Arg <td>Gln</td> <td>Gln</td> <td>Лlа</td> <td>Tyr</td> <td>Asp</td> <td>Val</td> <td>Leu</td> <td>He</td> <td>Lys</td> <td>Met</td> <td>Arg</td> <td>Lys</td> <td>Thr</td> <td>Asp</td> <td>Val</td> <td>Asp</td>	Gln	Gln	Лlа	Tyr	Asp	Val	Leu	He	Lys	Met	Arg	Lys	Thr	Asp	Val	Asp
470 His Pro Val Leu Ala Val Arg Val Leu Phe Glu Met Lys The A85 His A8		450					455					460				
Trp Gly His Pro Val Leu Ala Val Arg Val Leu Hoe Glu Met Lys Trp 485 Val 490 Val Tyr Ass 495 Val 505 Val 510 Val 520 Val 520 <td>Pro</td> <td>Leu</td> <td>Asp</td> <td>Glu</td> <td>Val</td> <td>Cys</td> <td>Tyr</td> <td>Arg</td> <td>Val</td> <td>Val</td> <td>Met</td> <td>Gln</td> <td>Leu</td> <td>Cys</td> <td>Gly</td> <td>Leu</td>	Pro	Leu	Asp	Glu	Val	Cys	Tyr	Arg	Val	Val	Met	Gln	Leu	Cys	Gly	Leu
Ala Arg 1	465					470					475					480
Ala Arg lle Lys Pro Asn Ala lle Thr Tyr Gly Tyr Tyr Asn Lys Val	Trp	Gly	His	Pro	Val	Leu	Ala	Va]	Arg	Val	Leu	Phe	Glu	Met	Lys	Thr
Solid Soli					485					490					495	
Val Leu Glu Ser Pro Pro Ser Ser Thr Arg Ser Gly Ile Pho Leu Leu Ala Gly Pho Arg Arg Ser Gly Leu Ala Gln Pho Arg Gly Ser Gly Leu Ala Gln Pho Arg Gly Ser Gly Ser Jeu Jeu Ala Gln Pho Arg Gly Ser Gly Ser Jeu Jeu Arg Gly Ser Gly Ser Jeu Jeu <td>Ala</td> <td>Arg</td> <td>He</td> <td>Lys</td> <td>Pro</td> <td>Asn</td> <td>Ala</td> <td>He</td> <td>Thr</td> <td>Tyr</td> <td>Gly</td> <td>Tyr</td> <td>Tyr</td> <td></td> <td>Lys</td> <td>Val</td>	Ala	Arg	He	Lys	Pro	Asn	Ala	He	Thr	Tyr	Gly	Tyr	Tyr		Lys	Val
Signature Sign																
Trp Thr Lys Val Arg Asp Asp Val Val Arg Gly Leu Ala Gln Phe Arg Gln Arg Gly Leu Ala Gln Phe Arg Gln Sal	Val	Leu		Ser	Pro	Trp	Pro		Ser	Thr	Arg	Ser		Пе	Phe	Leu
Facility	_															
Pro Leu Lys Lys Lys Thr Val Gln Arg Ser Gln Val Ser Ser Ile Ser Gly 560 550 555 550 560 560 560 560 560 560 560 560 560 560 560 560 560 560 570 575 <t< td=""><td>Trp</td><td></td><td>Lys</td><td>Val</td><td>Arg</td><td>Asn</td><td></td><td>Val</td><td>Arg</td><td>Gly</td><td>Leu</td><td>•</td><td>Gln</td><td>Phe</td><td>Arg</td><td>G1n</td></t<>	Trp		Lys	Val	Arg	Asn		Val	Arg	Gly	Leu	•	Gln	Phe	Arg	G1n
545 550 555 560					m.				_	0.7						
Gly		Leu	Lys	Lys	Thr		Gln	Arg	Ser	Gln		Ser	Ser	lle	Ser	
Asp Ala Glu 11e His Val Pro Glu Glu Glu Ala Ala Ala Arg Glu Leu 11e Asp Ala Glu His Val Ala Ala Ala Arg Glu Leu 11e Ala Lys Thr Lys Met Glu Thr Glu Val Cys Asp Ala Ser Ala Ile Val Ala Lys His Ser Glu Pro Ser Pro Glu Pro His Ser Pro Thr Glu Pro His Ser Pro Thr Glu Pro His H		6.1	c		6.3		т	61	6	,		61	,		,	
Asp Ala Glu lle His Val Pro Glu Glu Gln Ala Ala Arg Glu Leu lle 580 585 590 Thr Lys Thr Lys Met Gln Thr Glu Glu Val Cys Asp Ala Ser Ala lle 595 600 605 7. Val Ala Lys llis Ser Gln Pro Ser Pro Glu Pro His Ser Pro Thr Glu Glu 610 610 610 610 610 615 620 620 635 640 640 645 645 650 655 665 670 680 685 670 680 680 680 680 680 680 680 680 680 68	61 y	GIn	Ser	Asp		Gly	lyr	Gly	Ser		Asp	Glu	Leu	He		Asp
Thr Lys Thr Lys Met Gln Thr Glu Glu Val Cys Asp Ala Ser Ala Ile Yal Ala Lys Ilis Ser Gln Pro Ser Pro Glu Pro His Ser Pro Thr Glu Pro Pro Ala Lys Ser Glo Pro Ser Pro Glu Pro His Ser Pro Thr Glu Pro His Pro Thr Glu Pro His Pro Thr Glu Pro Ser His Pro Glu Pro His Pro Glu Pro			6.1			N. 3	15	61	61		. 1	. 1		61		7.1
Thr Lys Thr Lys Met Gln Thr Glu Glu Val Cys Asp Ala Ser Ala Ile 595	Asp	Ala	Glu		HIS	val	Pro	Glu		GIn	Ala	MIa	Arg		Leu	116
Nal Ala Lys Ilis Ser Gln Pro Ser Pro Glu Pro His Ser Pro Thr Glu	Th	1	Th		Mad	C1	TL	C1		V = 1	C	Λ	A 7 =		A 1	TI.
Val Ala Lys Ilis Ser Gln Pro Ser Pro Glu Pro His Ser Pro Thr Glu Pro Pro Ala Trp Gly Ser Ser Ile Val Lys Val Pro Ser Gly Ile Phe 625 635 635 640 640 640 640 640 640 640 640 640 640 640 640 640 640 640 650 655 655 655 655 655 655 655 670 670 660 665 665 670	1111	LyS		LyS	MG L	0111	mr		010	val	Cys	nsp		ser	ита	116
610	Va1	Ala		llic	Ser	Gla	Pro		Pro	Glu	Pro	Hic		Pro	Thr	Glu
Pro Pro Ala Trp Gly Ser Ser lle Val Lys Val Pro Ser Gly lle Phe 625	, a1		rys	1113	261	OIII		261	110	GIU	110		261	110	1111	Jiu
625 630 640 Asp Val Asn Ser Arg Lys Ser Ser Thr Gly Ser lle Ser Asn Val Leu 645 650 655 Phe Ser Thr Gln Asp Pro Val Glu Asp Ala Val Phe Gly Glu Ala Thr 660 665 670 Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe	Pro		Ala	Trn	Glv	Ser]]e	Val	Lvs	Val		Ser	Glv	ا ا ا	Phe
Asp Val Asn Ser Arg Lys Ser Ser Thr Gly Ser 11e Ser Asn Val Leu 655 Phe Ser Thr Gln Asp Pro Val Glu Asp Ala Val Phe Gly Glu Ala Thr 660 Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe		110	1316	пЪ	015		961	.110	101	Lys		110	961	01 Å	116	
Phe Ser Thr Gln Asp Pro Val Glu Asp Ala Val Phe Gly Glu Ala Thr 660 665 665 670 Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe		Val	Asn	Ser	Arø		Ser	Ser	Thr	Glv		He	Ser	Asn	Val	
Phe Ser Thr Gln Asp Pro Val Glu Asp Ala Val Phe Gly Glu Ala Thr 660 665 670 Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe	,			~~1	-	, 0	201	501			001		551			200
660 665 670 Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe	Phe	Ser	Thr	Gln		Pro	Val	Glu	Asp		Val	Phe	G] v	Glu		Thr
Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe									•		.		7			
	Asn	Leu	Lys		Asn	Glv	Asp	Arg		Glu	Lvs	Arg	Gln		His	Phe
				-		-	•	680			•	J	685	•		

Pro	Glu 690	Arg	Ser	Cys	Ser	Phe 695	Ser	Ser	Glu	Ser	Arg 700	Ala	Gly	Met	Leu
Leu	Lys	Lys	Ser	Ser	Leu	Asp	Ser	Asn	Ser	Ser	Glu	Met	Ala	He	Met
705					710					715					720
Met	Gly	Ala	Asp	Ala	Lys	He	Leu	Thr	Ala	Ala	Leu	Thr	Cys	Pro	Lys
				725					730					735	
Thr	Ser	Leu	Leu	His	lle	Ala	Arg	Thr	His	Ser	Phe	Glu	Asn	Val	Ser
			740					745					750		
Cys	His	Leu	Pro	Asp	Ser	Arg	Thr	Cys	Met	Ser	Glu	Ser	Thr	Trp	Asn
		755					760					765			
Pro	Ğlu	His	Arg	Ser	Ser	Pro	Val	Pro	Glu	Met	Leu	Glu	Glu	Ser	Gln
	770					775					780				
G] u	Leu	Leu	Glu	Pro	Val	Val	Asp	Asp	Val	Pro	Lys	Thr	Thr	Ala	Thr
785					790					795					800
Val	Asp	Thr	Tyr		Ser	Leu	Leu	Ser		Ser	Asn	Ser	Asn		Ser
				805					810					815	
Arg	Asp	Leu		Thr	Val	Ser	Lys		Leu	Arg	Asn	Lys		Ser	Ser
	_		820					825					830		
Leu	Tyr		He	Ala	Lys	Val		GIn	Arg	Glu	Asp		Glu	Thr	GIy
		835 D		c			840	T)	6.1	0	TC1	845	0.1		TI
Leu		Pro	Leu	Ser	Leu	Leu	Ala	ınr	GIU	Cys		Gly	61 y	Lys	in)
Dno	850	Son	C1	Aan	Luc	855	Dha	Can	Duo	Vol	860	110	A 20.00	Aan	Lan
	ASP	261.	61u	ASP	870	Leu	rne	ser	Pro	875	116	Ala	Arg	ASII	880
865 Ala	Asn	Glu	ء ا ا	Glu		Tyr	Met	Asn	Leu		Ser	Pro	Len	Glv	
MIG	пэр	014	110	885	261	1 9 1	SIC C	11311	890	rìs	561	110	Leu	895	561
Lvs	Ser	Ser	Ser		Glu	Leu	His	Arg		Glu	Asn	Arg	Glu		G1 v
,			900					905				7-2- 6	910		~-,
Met	Thr	Thr		Phe	He	His	Ala		Glu	Arg	Arg	Ser		Leu	Pro
		915					920			J		925			
Leu	Asp	His	Gly	Ser	Pro	Ala	Gln	Glu	Asn	Pro	Glu	Ser	Glu	Lys	Ser
	930					935					940				
Ser	Pro	Ala	Val	Ser	Arg	Ser	Lys	Thr	Phe	Thr	Gly	Arg	Phe	Lys	Gln
945					950					955					960
G1n	Thr	Pro	Ser	Arg	Thr	His	Lys	Glu	Arg	Ser	Thr	Ser	Leu	Ser	Ala
				965					970					975	

Leu \	Val	Arg	Ser	Ser	Pro	His	Gly	Ser	Leu	G1 y	Ser	Val	Val	Asn	Ser
			980					985					990		
Leu S	Ser	Gly	Leu	Lys	Leu	Asp	Asn	He	Leu	Ser	Gly	Pro	Lys	11e	Asp
		995					1000					1005			
Val 1	Leu	Lys	Ser	Gly	Met	Lys	Gln	Ala	Ala	Thr	Va]	Ala	Ser	Lys	Met
10	010					1015					1020				
Trp '	Val	Ala	Val	Ala	Ser	Ala	Tyr	Ser	Tyr	Ser	Asp	Asp	Glu	Glu	Glu
1025]	1030				-	1035				1	1040
Thr A	Asn	Arg	Asp	Tyr	Ser	Phe	Pro	Ala	Gly	Leu	Glu	Asp	His	lle	Leu
				1045					1050					1055	
Gly (Glu	Asn	He	Ser	Pro	Asn	Thr	Ser	Ile	Ser	Gly	Leu	Val	Pro	Ser
]	1060				-	1065					1070		
Glu l	Leu	Thr	Gln	Ser	Asn	Thr	Ser	Leu	Gly	Ser	Ser	Ser	Ser	Ser	Gly
	1	1075					1080					1085			
Asp '	Val	Gly	Lys	Leu	His	Tyr	Pro	Thr	Gly	Glu	Val	Pro	Phe	Pro	Arg
10	090					1095					1100				
Gly !	Met	Lys	Gly	Gln	Asp	Phe	Glu	Lys	Ser	Asp	His	Gly	Ser	Ser	Gln
1105]	1110					1115					1120
Asn '	Thr	Ser	Met	Ser	Ser	lle	Tyr	Gln	Asn	Cys	Ala	Met	Glu	Val	Leu
				1125		•			1130					1135	
Met S	Ser	Ser	Cys	Ser	Gln	Cys	Arg	Ala	Cys	Gly	Ala	Leu	Val	Tyr	Asp
			1140					1145					1150		
Glu (Glu	lle	Met	Ala	Gly	Trp	Thr	Ala	Asp	Asp	Ser	Asn	Leu	Asn	Thr
	1	1155					1160					1165			
Ala	Cys	Pro	Phe	Cys	Lys	Ser	Asn	Phe	Leu	Pro	Leu	Leu	Asn	11e	Glu
1	170					1175					1180				
Phe 1	Lys	Asp	Leu	Arg	Gly	Ser	Ala	Ser	Phe	Phe	Leu	Lys	Pro	Ser	Thr
1185					1190					1195					1200
Ser	G1 y	Asp	Ser	Leu	G1n	Ser	Gly	Ser	He	Pro	Leu	Ala	Asn	Glu	Ser
				1205					1210					1215	
Leu (Glu	His	Lys	Pro	Val	Ser	Ser	Leu	Ala	Glu	Pro	Asp	Leu	He	Asn
			1220					1225					1230		
Phe !	Met	Asp	Phe	Pro	Lys	His	Asn	Gln	He	He	Thr	Glu	G1u	Thr	Gly
]	1235					1240					1245			
Ser	Ala	Val	Glu	Pro	Ser	Asp	Glu	lle	Lys	Arg	Ala	Ser	G1 y	Asp	Val
1 .	250					1255					1260				

Gln	Thr	Met	Lys	He	Ser	Ser	Val	Pro	Asn	Ser	Leu	Ser	Lys	Arg	Asn
1265	5]	1270				1	1275]	1280
Val	Ser	Leu	Thr	Arg	Ser	His	Ser	Val	Gly	Gly	Pro	Leu	Gln	Asn	He
			}	285]	1290					1295	
Asp	Phe	Thr	Gln	Arg	Pro	Phe	His	Gly	He	Ser	Thr	Val	Ser	Leu	Pro
]	1300					1305					1310		
Asn	Ser	Leu	Gln	G]u	Val	Val	Asp	Pro	Leu	Gly	Lys	Arg	Pro	Asn	Pro
]	1315					1320					1325			
Pro	Pro	Val	Ser	Val	Pro	Tyr	Leu	Ser	Pro	Leu	Val	Leu	Arg	Lys	Glu
1	1330				j	1335]	1340				
Leu	Glu	Ser	Leu	Leu	Glu	Asn	Glu	Gly	Asp	Gln	Val	Ile	His	Thr	Ser
1345	5				350]	1355				:	1360
Ser	Phe	He	Asn	Gln	His	Pro	He	He	Phe	Trp	Asn	Leu	Val	Trp	Tyr
]	1365					1370					1375	
Phe	Arg	Arg	Leu	Asp	Leu	Pro	Ser	Asn	Leu	Pro	Gly	Leu	He	Leu	Thr
			1380					1385				:	1390		
Ser	Glu	His	Cys	Asn	Glu	Gly	Va]	Gln	Leu	Pro	Leu	Ser	Ser	Leu	Ser
		1395				-	1400					1405			
Gln	Asp	Ser	Lys	Leu	Val	Tyr	lle	G1n	Leu	Leu	Trp	Asp	Asn	Ile	Asn
]	1410				1	1415					1420				
Leu	His	Gln	Glu	Pro	Arg	Glu	Pro	Leu	Tyr	Va]	Ser	Trp	Arg	Asn	Phe
1425	5				1430					1435					1440
Asn	Ser	Glu	Lys	Lys	Ser	Ser	Leu	Leu	Ser	Glu	Glu	Gln	Gln	Glu	Thr
				1445					1450					1455	
Ser	Thr	Leu	Val	Glu	Thr	lle	Arg	Gln	Ser	He	Gln	His	Asn	Asn	Val
			1460					1465					1470		
Leu	Lys	Pro	lle	Asn	Leu	Leu	Ser	Gln	Gln	Met	Lys	Pro	Gly	Met	Lys
		1475					1480					1485			
Arg	Gln	Arg	Ser	Leu	Tyr	Arg	Glu	He	Leu	Phe	Leu	Ser	Leu	Val	Ser
]	1490					1495					1500				
Leu	Gly	Arg	Glu	Asn	He	Asp	11e	Glu	Ala	Phe	Asp	Asn	Glu	Tyr	Gly
1505	5				1510					1515					1520
He	Ala	Tyr	Asn	Ser	Leu	Ser	Ser	Glu	He	Leu	Glu	Arg	Leu	Gln	Lys
				1525					1530					1535	
He	Asp	Ala	Pro	Pro	Ser	Ala	Ser	Val	Glu	Trp	Cys	Arg	Lys	Cys	Phe
			1540					1545					1550		

Gly Ala Pro Leu lle

<210> 3747 <211> 288 <212> PRT <213> Homo sapiens <400> 3747 Met Tyr Val Phe Gln Leu Phe Asp Tyr Tyr Ser Ala Ser Gly Thr Thr Leu Leu Trp Gln Ala Phe Trp Glu Cys Val Val Val Val Trp Val Tyr Gly Ala Asp Arg Phe Thr Asp Asp lle Ala Cys Met lle Gly Tyr Arg Pro Cys Pro Trp Met Lys Trp Cys Trp Ser Phe Phe Thr Pro Leu Val Cys Met Gly Ile Phe Ile Phe Asn Val Val Tyr Tyr Lys Pro Leu Val Tyr Lys Asn Thr Asn Val Tyr Pro Trp Trp Gly Glu Ala Met Gly Trp Ala Phe Val Leu Ser Ser Met Leu Cys Met Pro Leu His Leu Leu Gly Cys Leu Leu Arg Ala Lys Gly Thr Met Ala Glu Cys Trp Lys His Leu Thr Gln Pro Ile Trp Gly Leu His His Leu Glu Tyr Arg Ala Gln Asp Ala Asp Val Arg Gly Leu Thr Thr Leu Thr Pro Val Ser Glu Ser Ser

Lys Val Val Val Glu Ser Val Met Gly Gln Leu Ser Ser His His

Gln Leu Thr Ser Gly Leu Trp Gly Lys Arg Leu Gln Tyr Ser Ile Leu

Gly Val Trp Ala Ala Asn Leu Ala Cys Ser Gly Phe Pro Pro Cys Ala

.205

Leu Gly Trp Ala His Pro Arg Glu Gly Thr Pro Asp Thr Ala Pro Thr 215 Ser Arg Leu Lys Ala Asp Ala Leu Pro Ala Pro Pro Val Phe Cys Val 225 230 235 240 Ala Ala Leu Thr His Val Cys Leu Ser Arg Pro Val Pro Arg Arg Leu 245 250 255 Ser Asp Pro Lys Lys Gly Phe Pro Asp Thr Arg Thr Glu Ala Gly Gly 265 Leu Gly Leu Gly Glu Gly Gly Pro Ala Gly Thr Phe Leu Leu Cys 275 280 285

<210> 3748

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3748

Met Val Ser Val Phe Arg Ser Cys Asp Leu Pro Thr Leu Ala Ser Gln

1 5 10 15

Arg Ala Gly 11e 11e Gly Val Ser His Cys Ala Arg Pro Thr Val Arg
20 25 30

Pho Pho Leu Pho Leu Pho Pho Pho Pho Clu Met Clu Ser Ser Ser Val

Phe Phe Leu Phe Leu Phe Phe Phe Glu Met Glu Ser Ser Val 35 40 45

Thr Arg Leu Glu Cys Ser Asp Val 11e Ser Ala His His Asn Leu Arg 50 55 60

Pro Pro Gly Ser Ser Asp Ser Pro Ala Leu Asp Ser Gln Val Ala Arg
65 70 75 80

lle Thr Gly Met Arg His His Thr Gln Leu lle Phe Val Phe Leu Val 85 90 95

Glu Thr Gly Phe His His 11e Gly Gln Asp Gly Leu His Leu Leu Thr 100 105 110

Ser

<210> 3749 <211> 1445 <212> PRT <213> Homo sapiens

<400> 3749 Met Gly Asn Leu Val lle Pro Leu Gly Lys Gly Arg Ala Gly Arg Val 10 Glu Ser Gly Gln Arg lle Pro Pro Pro Ala Pro Arg Pro Ser Val Glu 25 Cys Thr Gly Asp Asp Ile Ala Leu Gln Met Glu Lys Met Leu Phe Pro 40 Leu Lys Ser Pro Ser Ala Thr Trp Leu Ser Pro Ser Ser Thr Pro Trp 55 60 Met Met Asp Phe Ile Leu Thr Ser Val Cys Gly Leu Val Leu Leu Phe 65 70 75 80 Leu Leu Leu Tyr Val His Ser Asp Pro Pro Ser Pro Pro Pro Gly 90 Arg Lys Arg Ser Ser Arg Glu Pro Gln Arg Glu Arg Ser Gly Arg Ser 100 Arg Ser Arg Lys Ile Ser Ala Leu Lys Ala Cys Arg Ile Leu Leu Arg 120 Glu Leu Glu Glu Thr Arg Asp Leu Asn Tyr Leu Leu Glu Ser His Leu 135 140 Arg Lys Leu Ala Gly Glu Gly Ser Ser His Leu Pro Leu Gly Gly Asp 145 150 155 160 Pro Leu Gly Asp Val Cys Lys Pro Val Pro Ala Lys Ala His Gln Pro 170 165 His Gly Lys Cys Met Gln Asp Pro Ser Pro Ala Ser Leu Ser Pro Pro 190 180 185 Ala Pro Pro Ala Pro Leu Ala Ser Thr Leu Ser Pro Gly Pro Met Thr 195 200 205 Phe Ser Glu Pro Phe Gly Pro His Ser Thr Leu Ser Ala Ser Gly Pro 210 220 215

· Pro Glu Pro Leu Leu Pro Leu Lys Cys Pro Ala Thr Gln Pro His Val

225					230					235					240
Val	Phe	Pro	Pro	Ser	Pro	Gln	Pro	His	Gly	Pro	Leu	Ala	Ser	Ser	Pro
				245					250					255	
Pro	Pro	Pro	Asp	Ser	Ser	Leu	Ala	Gly	Leu	Gln	Cys	Gly	Ser	Thr	Thr
			260					265					270		
Gys	Pro	Val	Pro	Gln	Ser	Ser	Pro	Leu	His	Asn	Gln	Va]	Leu	Pro	Pro
		275					280					285			
Pro	Thr	Arg	Val	He	Ser	Gly	Leu	Gly	Cys	Ser	Ser	Asp	Pro	Пe	Trp
	290					295					300				
Asp	Leu	Tyr	Cys	Trp	Arg	Glu	Ala	Ala	Thr	Thr	Trp	Gly	Leu	Ser	Thr
305					310					315					320
Tyr	Ser	His	Gly	Lys	Ser	Gln	Pro	Arg	His	Leu	Pro	Asp	His	Pro	Ser
				325					330					335	
Glu	Ala	Ser	Phe	Trp	Gly	Asp	Pro	Thr	Pro	Lys	His	Met	Glu	Val	Gly
			340					345					350		
Gly	Cys	Thr	Phe	lle	His	Pro	Asp	Val	Gln	Lys	Leu	Leu	Glu	Thr	Leu
		355					360					365			
He	Ala	Lys	Arg	Ala	Leu	Met	Lys	Met	Trp	Gln	Glu	Lys	Glu	Arg	Lys
	370					375					380				
Arg	Ala	Asp	His	Pro	His	Met	Thr	Ser	Leu	Gly	Lys	Glu	Trp	Asp	He
385					390					395					400
Thr	Thr	Leu	Asn	Pro	Phe	Trp	Asn	Va]	Ser	Thr	Gln	Pro	Gln	G]n	Leu
				405					410					415	
Pro	Arg	Pro		Gln	Val	Ser	Asp		Thr	Thr	Val	Gly		His	Leu
			420					425					430		_
Gln	Gln		Arg	Ser	Gln	Leu		Trp	Asp	Leu	Pro		Leu	Asn	Ser
<i>a</i> 1		435		m.	m		440					445			0.1
Glu		Leu	Ala	Thr	Thr		Trp	Val	Ser	Arg		Pro	Ser	Ser	GIn
	450		C	37 3	Б	455		,	4.3	C	460	C	,	Б	C.1
	Ala	HIS	Ser	Val		Leu	Asp	Lys	Ala		Ihr	Ser	Leu	Pro	
465	D.	C)	W 1	C1	470	c	C	C.T.	1	475	C.L.	A 1 .	D	D.	480
61u	rro	GIU	vai		ATa	Ser	261.	61n		5er	GIB	Ala	rro	Pro	GIN
D	112	11:-	Mad	485	C1	D	C1	11 : .	490	Tl	D	λ1.	Т	495	C1
rro	1115	nis		мта	61n	rro	61n		rne	1113	rro	Ala		Pro	GIN
Sor	C1	Dass	500 Pro	Dag	نیم ا	۸1	C1	505	C1	Th.	C1	Λ1	510	Lau	S ~

		515					520					525			
Pro	Pro	Val	P.ro	Ser	Leu	Gly	Cys	Ser	Ser	Pro	Pro	Gln	He	Arg	Gly
	530					535					540				
Cys	Gly	Ala	Ser	Tyr	Pro	Thr	Ser	G1n	Glu	Arg	Thr	Gln	Ser	Val	He
545					550					555					560
Pro	Thr	Gly	Lys	Glu	Tyr	Leu	Glu	Trp	Pro	Leu	Lys	Lys	Arg	Pro	Lys
				565					570					575	
Trp	Lys	Arg	Val	Leu	Pro	Ser	Leu	Leu	Lys	Lys	Ser	Gln	Ala	Val	Leu
			580					585					590		
Ser	Gln	Pro	Thr	Ala	His	Leu	Pro	Gln	Glu	Arg	Pro	Ala	Ser	Trp	Ser
		595					600					605			
Pro	Lys	Ser	Ala	Pro	11e	Leu	Pro	Gly	Val	Val	Thr	Ser	Pro	Glu	Leu
	610					615					620				
Pro	Glu	His	Trp	Trp	Gln	Gly	Arg	Asn	Ala	lle	His	Gln	Glu	Gln	Ser
625					630					635					640
Cys	Gly	Pro	Pro	Ser	Arg	Leu	Gln	Ala	Ser	Gly	Asp	Leu	Leu	Gln	Pro
				645					650					655	
Asp	Gly	Glu	Phe	Pro	Gly	Arg	Pro	Gln	Ser	Gln	Ala	Glu	Asp	Thr	Gln
			660					665					670		
Gln	Ala	Leu	Leu	Pro	Ser	Gln	Pro	Ser	Glu	Phe	Ala	Gly	Lys	Gly	Arg
		675					680					685			
Lys	Asp	Val	Gln	Lys	Thr	Gly	Phe	Arg	Ser	Ser	Gly	Arg	Phe	Ser	Asp
	690					695					700				
Lys	Gly	Cys	Leu	Gly	Ser	Lys	Leu	Gly	Pro	Asp	Pro	Ser	Arg	Asp	Gln
705					710					715					720
Gly	Ser	Gly	Arg		Ser	Val	Lys	Ala	Leu	Asp	Glu	Asp	Lys		Ala
				725					730					735	
Glu	Gly	Asp		Arg	Arg	Ser	Trp		Tyr	Gln	Ser	Va]		Ser	Thr
			740					745					750		
Pro	Arg		Pro	Asp	Lys	Glu		Leu	Glu	Asn	Lys		GIn	He	His
		755					760					765			
Leu		Arg	Lys	val	61 y		He	Lys	Glu	61 y		He	Pro	Met	Pro
	770		C	er.		775			0		780	15	,	c	
	Arg	Arg	Ser	Trp		Met	Ala	Lys	Cys		va]	Pro	Lys	Ser	
785				Б	790	,				795		0.3	0.7	•	800
Thr	His	Arg	Lys	Pro	Glu	Lys	Leu	Ala	Ser	Trp	Arg	GIV	GLy	Lys	Ala

				805					810					815	
His	Val	Asn	Thr	Ser	Gln	Glu	Leu	Ser	Phe	Leu	His	Pro	Cys	Thr	Gln
			820					825					830		
Gln	He	Leu	Glu	Val	His	Leu	Val	Arg	Phe	Cys	Val	Arg	His	Ser	Trp
		835					840					845			
Gly	Thr	Asp	Leu	Gln	Ser	Leu	Glu	Pro	lle	Asn	Val	Trp	Ser	Gly	Glu
	850					855					860				
Ala	Gln	Ala	Pro	Pro	Phe	Pro	Gln	Ser	Thr	Phe	Thr	Pro	Trp	Ala	Ser
865					870					875					880
Trp	Val	Ser	Arg	Val	Glu	Ser	Val	Pro	Lys	Val	Pro	He	Phe	Leu	Gly
				885					890					895	
Lys	Arg	Pro	Gln	Ser	Gly	Pro	Gly	Asp	Asn	Arg	Thr	Thr	Ser	Lys	Ser
			900					905					910		
Val	Pro	Thr	Val	Ser	Gly	Pro	Leu	Ala	Ala	Pro	Pro	Pro	Glu	Gln	Glu
		915					920					925			
G1 y	Val	Gln	Arg	Pro	Pro	Arg	Gly	Ser	Gln	Ser	Ala	Asp	Thr	His	Gly
	930					935					940				
Arg	Ser	Glu	Ala	Phe	Pro	Thr	Gly	His	Lys	Gly	Arg	Gly	Cys	Ser	Gln
945					950					955					960
Pro	Pro	Thr	Cys	Ser	Leu	Val	Gly	Arg	Thr	Trp	Gln	Ser	Arg	Thr	Val
				965					970					975	
Leu	Glu	Ser	Gly	Lys	Pro	Lys	Pro	Arg	Leu	Glu	Gly	Ser	Met	Gly	Ser
			980					985					990		
Glu	Met	Ala	Gly	Asn	Glu	Ala	Trp	Leu	Glu	Ser	G}u	Ser	Met	Ser	Pro
		995					1000					1005			
Gly	Asp	Pro	Cys	Ser	Ser	Arg	Ala	Leu	Gln	Glu	Leu	Ser	Ile	Gly	Ser
]	1010					1015				-	1020				
G]n	Trp	Ala	Arg	Ala	Glu	Asp	Ala	Leu	G1n	Ala	Leu	Lys	Va]	Gly	Glu
1025	5				1030					1035				1	1040
Lys	Pro	Pro	Thr	Trp	Glu	Va]	Thr	Leu	Gly	Ala	Ser	Val	Arg	Ala	Ser
]	1045					1050					1055	
Ser	Gly	Ser	Val	Gln	Glu	Asp	Leu	Arg	Ser	Thr	Gly	Ala	Leu	Gly	Thr
			1060					1065					1070		
Thr			Pro	Ser	Ala	Ser	Ser	Val	Cys	Val			Asp	Pro	Glu
		1075					1080					1085			
C1n	1 011	Hic	Lou	Lvc	Ala	Gla	Val	V = 1	Sar	G111	H	Ala	Lou	Tlo	Val

1090			10	095]	100				
Gln Val	Asp S	Ser Glu	Glu (Gln Leu	Pro	Gly	Arg	Ala	Pro	Gly	He	Leu
1105			1110			1	115				I	120
Leu Gln	Asp	Gly Ala	Thr (Gly Leu	Cys	Leu	Pro	Gly	Arg	His	Met	Asp
		1125				1130				1	135	
Met Leu	Thr	Ala Ala	Asp A	Arg Leu	Pro	Thr	Gln	Ala	Pro	Leu	Ser	Thr
	1	140			1145				-	1150		
Ser Gln	Ser '	Val Ser	Gly l	Lys Asn	Met	Thr	Ala	Ser	Gln	Gly.	Pro	Cys
	1155			1160	1			1	1165			
Ala Leu	Leu '	Trp Lys	Gly (Gly Asp	Ser	Pro	G1 y	Gln	Gln	Glu	Pro	Gly
1170			1 1	175			1	1180				
Ser Pro	Lys	Ala Lys	Ala H	Pro Gln	Lys	Ser	Gln	Lys	Thr	Leu	Gly	Cys
1185			1190			J	195				1	200
Ala Gly	Lys	Gly Glu	Ala I	lis Arg	Arg	Pro	Arg	Thr	Gly	G1u	Gln	Gly
		1205	;			1210				1	215	
His Arg	Ser	Lys Gly	Pro A	Arg Thr	Ser	Glu	Ala	Ser	Gly	Arg	Ser	His
	1	220			1225					1230		
Pro Ala	Gln	Ala Arg	Glu 1	lle Gly	Asp	Lys	Gln	Glu	Arg	Lys	Tyr	Asn
	1235			1240)			1	1245			
Gln Leu	Gln	Leu Glu	Lys (Gly Glr	Thr	Pro	Pro	Glu	Ser	His	Phe	Gln
1250	i		12	255				1260				
Arg Lys	He	Ser His	His I	Pro Glr	Gly	Leu	His	Pro	Arg	Lys	Gly	Gly
1265			1270]	275			·	1	280
Thr Arg	Trp	Glu Asp	Val I	Leu Glr	Lys	Gly	Lys	Pro	Gly	Ala	Asp	Ala
		1285	,			1290				1	295	
Phe Gln	Ser	Trp Gly	Ser (Gly Pro	Pro	Arg	Gln	Phe	Met	Asp	Cys	Met
	1	300			1305					1310		
Ala Asp	Lys .	Ala Trp	Thr :			Val	Va]	Gly	Gln	11e	Leu	Val
	1315			1320					1325			
Asp Lys		Gly Leu			Arg	Gly			Glu	Val	Asn	Arg
1330				335				1340				
His Lys	Gly.	Asp Phe		Ala Glr	Glu			Pro	Ser	Cys		
1345			1350		_		1355			. 4		1360
Arg Gly	17.		0 .									
	His			Glu Arg			Glu	Met	Arg			Ala
Cvs Ser		1365	5			1370				1	375	

Arg Gly 11e Arg Asp Arg Asp Ser Ser Trp Ala Pro Pro Pro Arg Glu Pro Val Ser Pro Ala Gly Pro His His His Arg Pro Arg Met Ala Ser Thr Ser Gly Gly Pro His Pro Gln Leu Gln Glu Leu Met Ser Ala Gln Arg Cys Leu Ala Ser <210> 3750 <211> 138 <212> PRT <213> Homo sapiens <400> 3750 Met Gln Leu Leu Ala Gly Val Lys Leu Cys Thr Gly Arg Thr Leu Thr Asn His Pro His Tyr Glu Asp Ser Ser Leu Arg Glu Arg Thr Arg Ala Val Tyr Gln Ile Tyr Ala Lys Arg Ala Pro Glu Glu Val His Ala Leu Leu Arg Ser Phe Gly Thr Asp Tyr Val lle Leu Glu Asp Ser lle Cys Tyr Glu Arg Arg His Arg Arg Gly Cys Arg Leu Arg Asp Leu Leu Asp lle Ala Asn Gly His Met Met Asp Gly Pro Gly Glu Asn Asp Pro Asp Leu Lys Pro Ala Asp His Pro Arg Phe Cys Glu Glu Ile Lys Arg Asn Leu Pro Pro Tyr Val Ala Tyr Phe Thr Arg Val Phe Gln Asn Lys Thr Phe His Val Tyr Lys Leu Ser Arg Asn Lys

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<211> 917
<212> PRT
<213> Homo sapiens
<400> 3751
Met Glu Asn Ile Leu Cys Phe Leu Asn Ser Tyr Thr Glu Thr Val Leu
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Ser Pro Asp Ser His Cys Leu Asp Ile Asp Leu Asn Phe Ile Cys Leu
             20
                                 25
                                                      30
Ser Gly Leu Gly Leu Phe Ile Leu Tyr Leu Phe Tyr Met Val Leu Thr
                             40
Leu Tyr Ser Ser Pro Thr Glu Lys Asn Asp Thr Gln Lys His Gln
    50
Gly Arg Ala Arg Arg Lys Arg Lys Ser Val Thr Phe Lys Asp Arg Lys
                     70
                                         75
Ser Leu Gln Lys Glu Ala Glu Glu Glu Arg Lys Leu His Ser Phe Leu
                                     90
                 85
Lys Ser Phe Gly Pro Pro Val Ser Cys Ser Pro Leu Gly Gln His His
            100
                                105
                                                    110
Asp Thr Thr Leu Phe Arg Arg Leu Leu Cys Pro Asp Pro Val Cys Arg
                            120
Val Cys Asn Arg Ala Thr Ala Asp Ile Gln Arg Leu Leu Ser Trp Glu
    130
                        135
                                             140
Ser Leu Lys Asp Ala Ala Pro Ser Val Ser Pro Leu Ala Ser Ser Ala
                    150
145
                                        155
                                                             160
Ser Gly Ala Glu Ser Ser Phe Thr Leu Ala Ser Thr Pro Ser Ala Thr
                                    170
                165
Thr Pro Glu Asp Leu Ile Leu Ser Ser Arg Pro Lys Pro Ser Pro Pro
                                                     190
            180
                                185
Pro Pro Leu IIe Leu Ser Pro Asp Leu IIe Thr Thr Leu Ala Asp Leu
                            200
                                                205
Phe Ser Pro Ser Pro Leu Arg Asp Pro Leu Pro Pro Gln Pro Val Ser
                                             220
    210
                        215
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Pro Leu Asp Ser Lys Phe Pro 11e Asp His Ser Pro Pro Gln Gln Leu

<210> 3751

225					230					235					240
Pro	Phe	Pro	Leu	Leu	Pro	Pro	His	His	He	Glu	Arg	Val	Glu	Pro	Ser
				245					250					255	
Leu	Gln	Pro	Glu	Ala	Ser	Leu	Ser	Leu	Asn	Thr	He	Phe	Ser	Phe	Gly
			260					265					270		
Ser	Thr	Leu	Cys	Gln	Asp	11e	Ser	Gln	Ala	Val	Asn	Arg	Thr	Asp	Ser
		275					280					285			
Cys	Ala	Arg	His	His	Gly	Pro	Pro	Thr	Pro	Ser	Ala	Leu	Pro	Pro	Glu
	290					295					300				
Asp	Cys	Thr	Val	Thr	Gln	Ser	Lys	Ser	Asn	Leu	Thr	Val	Leu	Lys	Thr
305					310					315					320
Phe	Pro	Glu	Met	Leu	Ser	Leu	Gly	Gly	Ser	Gly	Gly	Ser	Ser	Thr	Ser
				325					330					335	
Ala	Pro	Thr	Thr	Lys	Gly	He	Asp	His	Ser	Cys	Pro	Ala	Ser	Ser	Glu
			340					345					350		
Phe	Ser	Trp	Trp	Gln	Pro	His	Ala	Lys	Asp	Ser	Phe	Ser	Ser	Asn	Phe
		355					360					365			
Val	Pro	Ser	Asp	Phe	Met	Glu	Glu	Leu	Leu	Thr	Leu	His	Ser	Ser	Glu
	0.50														
	370					375					380				
Ala		Leu	Gly	Gly	His		Val	Ala	Asn	lle		Gln	Pro	Val	Asn
Ala 385		Leu	Gly	G1y	His 390		Val	Ala	Asn	11e 395		Gln	Pro	Val	Asn 400
385	Ser				390	Ser				395	lle		Pro Arg		400
385	Ser				390	Ser				395	lle				400
385 Ile	Ser Ser	Phe	Leu	Ser 405	390 His	Ser Asp	lle	Pro	Ala 410	395 Leu	lle Leu	Glu		Gln 415	400 Val
385 Ile	Ser Ser	Phe	Leu	Ser 405	390 His	Ser Asp	lle	Pro	Ala 410	395 Leu	lle Leu	Glu	Arg	Gln 415	400 Val
385 Ile Lys	Ser Ser Arg	Phe Arg	Leu Gly 420	Ser 405 Asp	390 His Phe	Ser Asp Leu	lle Met	Pro Trp 425	Ala 410 Lys	395 Leu Glu	lle Leu Asn	Glu Gly	Arg Lys	Gln 415 Lys	400 Val Pro
385 Ile Lys	Ser Ser Arg	Phe Arg	Leu Gly 420	Ser 405 Asp	390 His Phe	Ser Asp Leu	lle Met	Pro Trp 425	Ala 410 Lys	395 Leu Glu	lle Leu Asn	Glu Gly	Arg Lys 430	Gln 415 Lys	400 Val Pro
385 Ile Lys Gly	Ser Ser Arg Ser	Phe Arg Phe 435	Leu Gly 420 Pro	Ser 405 Asp Thr	390 His Phe Gln	Ser Asp Leu Leu	Ile Met Arg 440	Pro Trp 425 Pro	Ala 410 Lys Asn	395 Leu Glu Tyr	lle Leu Asn Gln	Glu Gly Leu 445	Arg Lys 430	Gln 415 Lys Ser	400 Val Pro Ser
385 Ile Lys Gly	Ser Ser Arg Ser	Phe Arg Phe 435	Leu Gly 420 Pro	Ser 405 Asp Thr	390 His Phe Gln	Ser Asp Leu Leu	Ile Met Arg 440	Pro Trp 425 Pro	Ala 410 Lys Asn	395 Leu Glu Tyr	lle Leu Asn Gln	Glu Gly Leu 445	Arg Lys 430 Asn	Gln 415 Lys Ser	400 Val Pro Ser
385 Ile Lys Gly	Ser Arg Ser Asn 450	Phe Arg Phe 435 Met	Leu Gly 420 Pro Leu	Ser 405 Asp Thr	390 His Phe Gln Ser	Ser Asp Leu Leu Thr 455	Het Met Arg 440 Ala	Pro Trp 425 Pro Val	Ala 410 Lys Asn Lys	395 Leu Glu Tyr His	Leu Asn Gln Asp 460	Glu Gly Leu 445 Leu	Arg Lys 430 Asn	Gln 415 Lys Ser Glu	400 Val Pro Ser Ser
385 Ile Lys Gly	Ser Arg Ser Asn 450	Phe Arg Phe 435 Met	Leu Gly 420 Pro Leu	Ser 405 Asp Thr	390 His Phe Gln Ser	Ser Asp Leu Leu Thr 455	Het Met Arg 440 Ala	Pro Trp 425 Pro Val	Ala 410 Lys Asn Lys	395 Leu Glu Tyr His	Leu Asn Gln Asp 460	Glu Gly Leu 445 Leu	Arg Lys 430 Asn	Gln 415 Lys Ser Glu	400 Val Pro Ser Ser
385 11e Lys Gly Arg Phe 465	Ser Arg Ser Asn 450 Pro	Phe Arg Phe 435 Met	Leu Gly 420 Pro Leu Trp	Ser 405 Asp Thr Thr	390 His Phe Gln Ser 470	Asp Leu Leu Thr 455 Lys	Het Arg 440 Ala Gly	Pro Trp 425 Pro Val	Ala 410 Lys Asn Lys	395 Leu Glu Tyr His Glu 475	Leu Asn Gln Asp 460 Trp	Glu Gly Leu 445 Leu Gln	Arg Lys 430 Asn	Gln 415 Lys Ser Glu	400 Val Pro Ser Ser His 480
385 11e Lys Gly Arg Phe 465	Ser Arg Ser Asn 450 Pro	Phe Arg Phe 435 Met	Leu Gly 420 Pro Leu Trp	Ser 405 Asp Thr Thr	390 His Phe Gln Ser 470	Asp Leu Leu Thr 455 Lys	Het Arg 440 Ala Gly	Pro Trp 425 Pro Val	Ala 410 Lys Asn Lys	395 Leu Glu Tyr His Glu 475	Leu Asn Gln Asp 460 Trp	Glu Gly Leu 445 Leu Gln	Arg Lys 430 Asn Ala	Gln 415 Lys Ser Glu	400 Val Pro Ser Ser His 480
385 Ile Lys Gly Arg Phe 465 Gln	Ser Arg Ser Asn 450 Pro	Phe Arg Phe 435 Met Phe	Leu Gly 420 Pro Leu Trp	Ser 405 Asp Thr Thr Ala Tyr 485	390 His Phe Gln Ser 470 Ser	Asp Leu Leu Thr 455 Lys	Met Arg 440 Ala Gly Cys	Pro Trp 425 Pro Val Lys	Ala 410 Lys Asn Lys Leu Glu 490	395 Leu Glu Tyr His Glu 475 Asp	Leu Asn Gln Asp 460 Trp	Glu Gly Leu 445 Leu Gln Leu	Arg Lys 430 Asn Ala	Gln 415 Lys Ser Glu 11e Gln 495	400 Val Pro Ser Ser His 480 Lys
385 Ile Lys Gly Arg Phe 465 Gln	Ser Arg Ser Asn 450 Pro	Phe Arg Phe 435 Met Phe	Leu Gly 420 Pro Leu Trp	Ser 405 Asp Thr Thr Ala Tyr 485	390 His Phe Gln Ser 470 Ser	Asp Leu Leu Thr 455 Lys	Met Arg 440 Ala Gly Cys	Pro Trp 425 Pro Val Lys	Ala 410 Lys Asn Lys Leu Glu 490	395 Leu Glu Tyr His Glu 475 Asp	Leu Asn Gln Asp 460 Trp	Glu Gly Leu 445 Leu Gln Leu	Arg Lys 430 Asn Ala His	Gln 415 Lys Ser Glu 11e Gln 495	400 Val Pro Ser Ser His 480 Lys

		515					520					525			
Phe	Asn	Gly	lle	Thr	Asn	Thr	Ser	Met	Ser	His	Glu	Ser	Pro	Val	Leu
	530					535					540				
Pro	Pro	Pro	Gln	Pro	Leu	Phe	Leu	Pro	Ser	Thr	Gln	Pro	Leu	Pro	Leu
545					550					555					560
Pro	Gln	Thr	Leu	Pro	Arg	Gly	Gln	Ser	Leu	His	Leu	Thr	Gln	Val	Lys
				565					570					575	
Ser	Leu	Ala	G1n	Pro	Gln	Ser	Pro	Phe	Pro	Ala	Leu	Pro	Pro	Ser	Pro
			580					585					590		
Leu	Phe	Leu	He	Arg	Val	Cys	Gly	Val	Cys	Phe	His	Arg	Pro	G1n	Asn
		595					600					605			
Glu	Ala	Arg	Ser	Leu	Met	Pro	Ser	Glu	He	Asn	His	Leu	Glu	Trp	Asn
	610					615					620				
Val	Leu	Gln	Lys	Val	GIn	Glu	Ser	Val	Trp	Gly	Leu	Pro	Ser	Val	Val
625					630					635					640
Gln	Lys	Ser	Gln	Glu	Asp	Phe	Cys	Pro	Pro	Ala	Pro	Asn	Pro	Val	Leu
				645					650					655	
Val	Arg	Lys	Ser	Phe	Lys	Val	His	Val	Pro	lle	Ser	He	Ile	Pro	Gly
			660					665					670		
Asp	Phe		Leu	Ser	Ser	Glu		Arg	Lys	Lys	Leu		Gln	His	He
		675					680					685			
Arg		Arg	Leu	11e	Gln	_	Arg	Trp	Gly	Leu		Arg	Arg	He	His
	690					695					700				
	Ser	Leu	Ser	Leu		Arg	Pro	Gln	Asn		lle	Ser	Glu	Leu	
705					710					715	_	_			720
Val	Ser	Glu	Ser		llis	Gly	Pro	Leu		He	Ser	Leu	Val		Gly
0.1				725					730	c	0	Di	D	735	
GIn	Arg	Cys	Asn	Val	Leu	Lys	Lys		Ala	Ser	Ser	Phe		Arg	Ser
151		C1	740	c	c		и.	745	C		C1.		750 V 1	C1	
Phe	HIS		Arg	Ser	Ser	Asn		Leu	Ser	Met	61u		val	GIY	Asn
т.	C1	755	C	C	C 1	C1.	760	4.1	13	1	Α.	765			11.
ıyr		61 y	Cys	261.	61n		ınr	Ala	Pro	Lys		HIS	Leu	Leu	111 S
Λ	770	C1	Tl	C =	C = 11	775	C1	Λ	1	Λ	780 San	Λ	C	C1	Δ
785	110	olu	Thr	ser	5er		บาน	лѕр	Leu	Arg		ASN	ser	GIU	Arg

Asp Leu Gly Thr His Met Met His Leu Ser Gly Asn Asp Ser Gly Val Arg Leu Gly Gln Lys Gln Leu Glu Asn Ala Leu Thr Val His Leu Ser Lys Lys Phe Glu Glu Ile Asn Glu Gly Arg Met Pro Gly Thr Val His Ser Ser Trp His Ser Val Lys Gln Thr 11e Cys Leu Pro Glu Lys Ser His Ser Gln Ile Lys His Arg Asn Leu Ala Ala Leu Val Ser Glu Asp His Glv Val Asp Thr Ser Gln Glu Met Ser Phe Leu Ser Ser Asn Lys Gln Lys Met Leu Glu Ala His 11e Lys Ser Phe His Met Lys Pro 11e Leu Asn Leu Ser 11e

<210> 3752

<211> 1318

<212> PRT

<213> Homo sapiens

<400> 3752

Met Asp Arg Gln Cys Ser Glu Lys Pro His Ser Cys Thr Pro Thr Gly Arg Val Ser Ser Ala Val Ser Gln Asn Ser Arg 11e Ser Pro Pro Val Ser Thr Ser Met Lys Asp Ser Ser Cys Met Glu Val His Gln Asp Ser Ala Arg Arg Asp Arg Trp Ser His Pro Thr Thr 11e Leu Leu His Lys Ser Gln Ser Ser Gln Ala Thr Leu Met Pro Gln Glu His Arg Met Phe Met Gly Glu Ala Tyr Ser Ala Ala Thr Cys Phe Lys Met Leu Gln Asp

Met	Asn	Ser	Ala	Asp	Pro	Phe	His	Leu	Lys	Tyr	Пе	He	Lys	Lys	He
			100					105					110		
Lys	Asn	Met	Ala	His	Gly	Ser	Pro	Lys	Leu	Val	Met	Glu	Thr	lle	His
		115					120					125			
Asp	Tyr	Phe	He	Asp	Asn	${\tt Pro}$	Glu	He	Ser	Ser	Arg	His	Lys	Phe	Arg
	130					135					140				
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Glu	Thr	Trp	Glu	Lys	Thr	Phe	Thr	Arg	Leu	Ala	Leu	Glu	Asn	Met	Thr
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Lys	Ala	Thr	Glu	Leu	Glu	Asp	He	Tyr	Gln	Asp	Ala	Ala	Ser	Asn	Met
			180					185					190		
Leu	Val	Ala	Пe	Cys	Arg	His	Ser	Trp	Arg	Val	Val	Ala	Gln	His	Leu
		195					200					205			
Glu	Thr	Glu	Leu	Leu	Thr	Gly	Val	Phe	Pro	His	Arg	Ser	Leu	Leu	Tyr
	210					215					220				
Val	Met	Gly	Val	Leu	Ser	Ser	Ser	Glu	Glu	Leu	Phe	Ser	Gln	Glu	Asp
225					230					235					240
Lys	Ala	Cys	Trp	Glu	Glu	Gln	Leu	He	Gln	Met	Ala	lle	Lys	Ser	Val
				245					250					255	
Pro	Phe	Leu	Ser	Thr	Asp	Va]	Trp	Ser	Lys	Glu	Leu	Leu	Trp	Thr	Leu
			260					265					270		
Thr	Thr	Pro	Ser	Trp	Thr	Gln	Gln	Glu	Gln	Ser	Pro	Glu	Lys	Ala	Phe
		275					280					285			
Met	Phe	Thr	Tyr	Tyr	Gly	Leu	He	Leu	Gln	Ala	Glu	Lys	Asn	Gly	Ala
	290					295					300				
Thr	Val	Arg	Arg	His	Leu	Gln	Ala	Leu	Leu	Glu	Thr	Ser	His	Gln	Trp
305					310					315					320
Pro	Lys	Gln	Arg	Glu	Gly	Met	Ala	Leu	Thr	Ser	Gly	Leu	Ala	Ala	Thr
				325					330					335	
Arg	His	Leu	Asp	Asp	Val	Trp	Ala	Val	Leu	Asp	Gln	Phe	Gly	Arg	Ser
			340					345					350		
Arg	Pro	lle	Arg	Trp	Ser	Leu	Pro	Ser	Ser	Ser	Pro	Lys	Asn	Ser	Glu
		355					360					365			
Aon	Lou	Ana	Typ	Lyo	Тэээ	A 1 a	Com	C	Th	110	Lou	Lau	A 1 o	Tun	C1

	370					375					380				
Gln	Val	Λla	Ala	Lys	Ala	Arg	Ala	His	Пe	Leu	Pro	Trp	Val	Asp	Asn
385					390					395					400
He	Val	Ser	Arg	Met	Val	Phe	Tyr	Phe	His	Tyr	Ser	Ser	Trp	Asp	Glu
				405					410					415	
Thr	Leu	Lys	Gln	Ser	Phe	Leu	Thr	Ala	Thr	Leu	Met	Leu	Met	Gly	Ala
			420					425					430		
Val	Ser	Arg	Ser	Glu	Gly	Ala	His	Ser	Tyr	Glu	Phe	Phe	Gln	Thr	Ser
		435					440					445			
Glu	Leu	Leu	Gln	Cys	Leu	Met	Val	Leu	Met	Glu	Lys	Glu	Pro	Gln	Asp
	450					455					460				
Thr	Leu	Cys	Thr	Arg	Ser	Arg	Glņ	Gln	Ala	Met	His	lle	Ala	Ser	Ser
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Leu	Cys	Lys	Leu	Arg	Pro	Pro	He	Asp	Leu	Glu	Arg	Lys	Ser	Gln	Leu
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Leu	Ser	Thr	Cys	Phe	Arg	Ser	Val	Phe	Ala	Leu	Pro	Leu	Leu	Asp	Ala
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Leu	Glu	Lys	His	Thr	Cys	Leu	Phe	Leu	Glu	Pro	Pro	Asn	Πe	Gln	Leu
		515					520					525			
Trp	Pro	Val	Ala	Arg	Glu	Arg	Ala	Gly	Trp	Thr	His	Gln	Gly	Trp	Gly
	530					535					540				
Pro	Arg	Ala	Val	Leu	llis	Cys	Ser	Glu	His	Leu	Gln	Ser	Leu	Tyr	Ser
545					550					555					560
Arg	Thr	Met	Glu		Leu	Asp	Phe	Met		Gln	Ser	Leu	He		Gln
				565					570		_			575	
Asn	Pro	Thr		Asp	Glu	Leu	His		Leu	Leu	Ser	His		Tyr	He
m			580	0.1				585		6.1		. 1	590		C
Trp	Leu		Ser	Glu	Lys	Ala		Glu	Arg	GIn	Arg		Val	HIS	Ser
C		595	1	1 .	,	DI.	600	Δ	11.: -	Α	C1	605	1	۸	D
Cys		11e	Leu	Leu	Lys	Phe	Leu	Asn	HIS	Asn		iyr	Leu	Asp	РГО
Luc	610	Aan	Dhe	1,,,,	A ~	615	C1	Cla	Lau	Vo.1	620	l la	Lou	C1v	Mat
	GIU	Asp	rne	Lys		He	GIY	GIN	Leu		GIY	116	Leu	оту	ме t 640
625	Cva	C.L.s.	Acr	Duc	630	A 25.00	A1.c	The	Cls.	635	Cvc	Sor	Lov	610	
Leu	CyS	OIII	asp	645	nsp	Arg	nia	1111	650	vi 8	CyS	261	ı,cu	655	Oly
Ala	Ser	Hic	Leu		Gla	Leu	leu	Met		Hie	lve	Thr	Glv		Ala

			660					665					670		
Leu	Gln	Ala	Glu	Ser	Gln	Ala	Pro	Lys	Glu	Leu	Ser	Gln	Ala	His	Ser
		675					680					685			
Asp	Gly	Ala	Pro	Leu	Trp	Asn	Ser	Arg	Asp	Gln	Lys	Ala	Thr	Pro	Leu
	690					695					700				
Gly	Pro	Gln	Glu	Met	Ala	Lys	Asn	His	Пe	Phe	Gln	Leu	Cys	Ser	Phe
705					710					715					720
Gln	Val	He	Lys	Asn	lle	Met	Gln	Gln	Leu	Thr	Leu	Ala	Glu	Leu	Ser
				725					730					735	
Asp	Leu	11e	Trp	Thr	Ala	Ile	Asp	Gly	Leu	Gly	Ser	Thr	Ser	Pro	Phe
			740					745					750		
Arg	Val	Gln	Ala	Ala	Ser	Glu	Met	Leu	Leu	Thr	Ala	Val	Gln	Glu	llis
		755					760					765			
Gly	Ala	Lys	Leu	Glu	lle	Val	Ser	Ser	Met	Ala	Gln	Ala	He	Arg	Leu
	770					775					780				
Arg	Leu	Cys	Ser	Val	His	11e	Pro	Gln	Ala	Lys	Glu	Lys	Thr	Leu	His
785					790					795					800
Ala	lle	Thr	Leu	Leu	Ala	Arg	Ser	His	Thr	Cys	Glu	Leu	Val	Ala	Thr
				805					810					815	
Phe	Leu	Asn	He	Ser	He	Pro	Leu	Asp	Ser	His	Thr	Phe	Gln	Leu	Trp
			820					825					830		
Arg	Ala	Leu	Gly	Ala	Glu	Gln	Pro	Thr	Ser	His	Leu	Val	Leu	Thr	Thr
		835					840					845			
Leu	Leu	Ala	Cys	Leu	Gln	Glu	Arg	Pro	Leu	Pro	Thr	G1 y	Ala	Ser	Asp
	850					855					860				
Ser	Ser	Pro	Cys	Pro	Lys	Glu	Lys	Thr	Tyr	Leu	Arg	Leu	Leu	Лlа	Ala
865					870					875					880
Met	Asn	Met	Leu	His	Glu	Leu	Gln	Phe	Ala	Arg	Glu	Phe	Lys	Gln	Ala
				885					890					895	
Va]	Gln	Glu	Gly	Tyr	Pro	Lys	Leu	Phe	Leu	Ala	Leu	Leu	Thr	Gln	Met
			900					905					910		
His	Tyr	Val	Leu	Glu	Leu	Asn	Leu	Pro	Ser	Glu	Pro	Gln	Pro	Lys	Gln
		915					920					925			
Gln	Ala	GIn	Glu	Ala	Ala	Val	Pro	Ser	Pro	Gln	Ser	Cys	Ser	Thr	Ser
	930					935					940				
Leu	Glu	Ala	Leu	Lys	Ser	Leu	Leu	Ser	Thr	Thr	Gly	His	Trp	His	Asp

945				950					955					960
Phe Ala	His	Leu	Glu	Leu	Gln	Gly	Ser	Trp	Gl u	Leu	Phe	Thr	Thr	He
			965					970					975	
His Thr	Tyr	Pro	Lys	G] y	Val	Gly	Pro	Leu	Ala	Arg	Ala	Met	Val	Gln
		980					985					990		
Asn His	Cys	Arg	Gln	He	Pro	Ala	Val	Leu	Arg	Gln	Leu	Leu	Pro	Ser
	995					1000					1005			
Leu Glr	Ser	Pro	GIn	Glu	Arg	Glu	Arg	Lys	Val	Ala	Ile	Leu	He	Leu
1010)				1015					1020				
Thr Lys	Phe	Leu	Tyr	Ser	Pro	Val	Leu	Leu	Glu	Val	Leu	Pro	Lys	Gln
1025				1030					1035				İ	1040
Ala Ala	Leu	Thr	Va]	Leu	Ala	Gln	61 y	Leu	His	Asp	Pro	Ser	Pro	Glu
]	1045					1050					1055	
Val Arg	val	Leu	Ser	Leu	Gln	Gly	Leu	Ser	Asn	lle	Leu	Phe	His	Pro
		1060					1065					1070		
Asp Lys	Gly	Ser	Leu	Leu	Gln	Gly	Gln	Leu	Arg	Pro	Leu	Leu	Asp	Ser
	1075					1080					1085			
Phe Phe	Gln	Ser	Ser	Asp	Gln	Val	He	Val	Cys	lle	Met	Gly	Thr	Val
									•			-		
1090					1095					100		j		
)				1095					100				
1090)		His		1095			Gln		100			Gln	
1090 Ser Asp) Thr	Leu	His	Arg	1095 Leu	Gl y	Ala	Gln	Gly 1115	1100 Thr	Gly	Ser	Gln	Ser 1120
1090 Ser Asp 1105) Thr	Leu Ala	His	Arg	1095 Leu	Gl y	Ala Ser	Gln	Gly 1115	1100 Thr	Gly	Ser Glu	Gln	Ser 1120
1090 Ser Asp 1105) Thr Val	Leu Ala	His Tle 1125	Arg 1110 Ser	1095 Leu Thr	Gly Arg	Ala Ser	Gln Phe	G1y 1115 Phe	Thr Asn	Gly	Ser Glu	Gln Arg 1135	Ser 1120 Asp
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1090 Ser Asp 1105 Leu Gly	Thr Val	Leu Ala Ala Ala	His Tle 1125 Ala	Arg 1110 Ser Ala	Leu Thr Met	Gly Arg Ala	Ala Ser Leu 1145	Gln Phe I130 Phe	Gly 1115 Phe Gly	Thr Asn Asp	Gly Asp Leu	Ser Glu Val	Gln Arg 1135 Ala	Ser 1120 Asp Ala
1090 Ser Asp 1105 Leu Gly Gly Ho	Thr Val	Leu Ala Ala Ala	His Tle 1125 Ala	Arg 1110 Ser Ala	Leu Thr Met Ser	Gly Arg Ala	Ala Ser Leu 1145	Gln Phe I130 Phe	Gly 1115 Phe Gly	Thr Asn Asp Gln	Gly Asp Leu	Ser Glu Val	Gln Arg 1135 Ala	Ser 1120 Asp Ala
1090 Ser Asp 1105 Leu Gly Gly Ho	Thr Val Arg Asp	Leu Ala Ala Ala II40 Arg	His Tle 1125 Ala Glu	Arg 1110 Ser Ala Leu	Leu Thr Met Ser	Gly Arg Ala Gly	Ala Ser Leu 1145 Leu	Gln Phe 1130 Phe Arg	Gly 1115 Phe Gly Thr	Thr Asn Asp Gln	Gly Asp Leu Val	Ser Glu Val His	Gln Arg 1135 Ala Gln	Ser 1120 Asp Ala Ser
Ser Asp 1105 Leu Gly Gly Ho	Thr Val Arg Asp 1155	Leu Ala Ala Ala II40 Arg	His Tle 1125 Ala Glu	Arg 1110 Ser Ala Leu Leu	Leu Thr Met Ser	Gly Arg Ala Gly	Ala Ser Leu 1145 Leu	Gln Phe 1130 Phe Arg	Gly 1115 Phe Gly Thr	Thr Asn Asp Gln	Gly Asp Leu Val	Ser Glu Val His	Gln Arg 1135 Ala Gln	Ser 1120 Asp Ala Ser
Ser Asp 1105 Leu Gly Gly Ho Met Ala	Thr Val Arg Asp 1155 Pro	Leu Ala Ala 1140 Arg Leu	His Tle 1125 Ala Glu Leu	Arg 1110 Ser Ala Leu Leu	Thr Met Ser His	Gly Arg Ala Gly 1160 Leu	Ala Ser Leu 1145 Leu Lys	Gln Phe I130 Phe Arg	Gly 1115 Phe Gly Thr	Thr Asn Asp Gln Cys	Gly Asp Leu Val 1165	Ser Glu Val His Ala	Gln Arg 1135 Ala Gln Val	Ser 1120 Asp Ala Ser
Ser Asp 1105 Leu Gly Gly Ho Met Ala Met Val	Thr Val Arg Asp 1155 Pro	Leu Ala Ala 1140 Arg Leu	His Tle 1125 Ala Glu Leu	Arg 1110 Ser Ala Leu Leu	Thr Met Ser His	Gly Arg Ala Gly 1160 Leu	Ala Ser Leu 1145 Leu Lys	Gln Phe 1130 Phe Arg Asp Cys	Gly 1115 Phe Gly Thr	Thr Asn Asp Gln Cys	Gly Asp Leu Val 1165	Ser Glu Val His Ala	Gln Arg 1135 Ala Gln Val	Ser 1120 Asp Ala Ser
Ser Asp 1105 Leu Gly Gly Ho Met Ala Met Val 1170 Thr Glr	Thr Val Arg Asp 1155 Pro	Leu Ala Ala 1140 Arg Leu Lys	His Tle 1125 Ala Glu Leu	Arg 1110 Ser Ala Leu Leu Thr	Thr Met Ser His 1175 Phe	Gly Arg Ala Gly 1160 Leu Tyr	Ala Ser Leu 1145 Leu Lys	Gln Phe 1130 Phe Arg Asp Cys	Gly 1115 Phe Gly Thr Gln Ala	Asp Asp Gln Cys 1180 Val	Gly Asp Leu Val 1165 Pro	Ser Glu Val 1150 His Ala	Gln Arg 1135 Ala Gln Val Arg	Ser 1120 Asp Ala Ser Ala Trp
Ser Asp 1105 Leu Gly Gly Ho Met Ala Met Val 1170 Thr Glr 1185	Thr Val Arg Asp 1155 Pro	Leu Ala Ala 1140 Arg Leu Lys	His Tle 1125 Ala Glu Leu	Arg 1110 Ser Ala Leu Leu Thr	Thr Met Ser His 1175 Phe	Gly Arg Ala Gly 1160 Leu Tyr	Ala Ser Leu 1145 Leu Lys Arg	Gln Phe 1130 Phe Arg Asp Cys	Gly 1115 Phe Gly Thr Gln Ala	Asp Asp Gln Cys 1180 Val	Gly Asp Leu Val 1165 Pro	Ser Glu Val 1150 His Ala Leu	Gln Arg 1135 Ala Gln Val Arg	Ser 1120 Asp Ala Ser Ala Trp
Ser Asp 1105 Leu Gly Gly Ho Met Ala Met Val 1170 Thr Glr 1185	Thr Val Arg Asp 1155 Pro	Leu Ala Ala 1140 Arg Leu Lys	His Tle 1125 Ala Glu Leu Phe Thr	Arg 1110 Ser Ala Leu Thr 1190 Leu	Thr Met Ser His Phe	Gly Arg Ala Gly 1160 Leu Tyr	Ala Ser Leu 1145 Leu Lys Arg	Gln Phe 1130 Phe Arg Asp Cys Leu 1210	Gly 1115 Phe Gly Thr Gln Ala 1195 Ala	Asn Asp Gln Cys 1180 Val	Gly Asp Leu Val 1165 Pro Leu Glu	Ser Glu Val 1150 His Ala Leu	Gln Arg 1135 Ala Gln Val Arg Gly 1215	Ser 1120 Asp Ala Ser Ala Trp 1200 Leu
Ser Asp 1105 Leu Gly Gly Ho Met Ala Met Val 1170 Thr Glr 1185 Arg Leu	Thr Val Arg Asp 1155 Pro Ala Leu Arg	Leu Ala Ala 1140 Arg Leu Lys	His Tle 1125 Ala Glu Leu Phe Thr	Arg 1110 Ser Ala Leu Thr 1190 Leu	Thr Met Ser His Phe	Gly Arg Ala Gly 1160 Leu Tyr Cys	Ala Ser Leu 1145 Leu Lys Arg	Gln Phe 1130 Phe Arg Asp Cys Leu 1210	Gly 1115 Phe Gly Thr Gln Ala 1195 Ala	Asn Asp Gln Cys 1180 Val	Gly Asp Leu Val 1165 Pro Leu Glu Arg	Ser Glu Val 1150 His Ala Leu	Gln Arg 1135 Ala Gln Val Arg Gly 1215	Ser 1120 Asp Ala Ser Ala Trp 1200 Leu

Ser Cys His 11e Lys Thr Trp Val Thr Leu Phe 11e Gly His Thr 11e Cys Tyr His Pro Gln Ala Val Phe Gln Met Leu Asn Ala Val Asp Thr Asn Leu Leu Phe Arg Thr Phe Glu His Leu Arg Ser Asp Pro Glu Pro Ser 11e Arg Glu Phe Ala Thr Ser Gln Leu Ser Phe Leu Gln Lys Val Ser Ala Arg Pro Lys Gln

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<211> 240

<212> PRT

<213> Homo sapiens

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Met Ser Ala Ala His Val Pro Gly Ala His Pro Arg Arg Leu Cys

130		135			140	
Leu Leu Ala	Ala Pro	Thr Asp	Phe Leu	Ser Phe	Leu Trp	Ser Ala Leu
145		150		155		160
Pro Pro Ser	Leu Pro	Pro Pro	Tyr Pro	Gln Arg	His Leu	Leu Thr Pro
	165			170		175
Ser Ser Met	Leu Cys	Pro Gly	Trp Asp	Ala Ser	Trp Ala	Val Pro Gly
	180		185			190
Pro Arg Leu	Glu Pro	Leu Pro	Leu Phe	Leu Trp	Val Ser	Pro Cys Pro
195			200		205	
Ala Ala Gly	Asn Leu	Arg Val	Leu Ser	Lys Lys	Ser Cys	Lys Leu Ala
210		215			220	
Arg Pro Gly	Arg Ala	Glu Ala	Ser Phe	Leu Pro	Asp Gly	Trp Phe Ala
225 .		230		235		240
		•				
(0.0) 0554						
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Met Trp Ser		GIN GIN	Leu Leu		ren VIa	
l Trp Gln His	Cyc. Pro	He Ser	Cly lou	10	Lou Ara	15 .
116 0111 1112	20	11e 5e1	25	лар гие	Leu Aig	30
Gly His Ser		Pro Arg		Ser Pro	leu Val	
35	Lou om	iio nig	40	561 110	45	0111 110 15/5

 Met 1rp Ser Leu Pro Gly Gly Leu Leu Ser Gly Leu Ala Inr His Pro 1
 5
 10
 15
 .

 Trp Gln His Cys Pro 1 le Ser Gly Leu Asp Phe Leu Arg Ser Cys Arg 20
 25
 30
 30

 Gly His Ser Leu Gln Pro Arg Arg Gly Ser Pro Leu Val Gln Pro Lys 35
 40
 45
 45

 Leu Ser Met Gly Leu Glu His Pro Cys Gln Pro Cys Ala Pro Ser Thr 50
 55
 60
 60

 Pro Arg Ser Arg Phe Ser Ser Val Ser Gln Gln Arg Gly Ser Val Leu 65
 70
 75
 80

 Pro Ser Leu Cys Val Ser Trp Ala Lys Thr Trp Gly Ala Leu Gly Gln 85
 90
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 Gly Trp Cys Phe Pro Gln Ala His Leu Gly Arg Gly Leu Ala Pro Ser 100
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 Leu Ala Gln Val Leu Ser Ser Ala Leu Val Ala Leu Glu
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115 120 125

<210> 3755 <211> 890

<212> PRT

<213> Homo sapiens

<400> 3755

Met Met Met Val Met Gln Pro Glu Gly Leu Gly Ala Gly Glu Gly Arg

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Phe Ala Gly Gly Gly Gly Gly Glu Tyr Met Glu Gln Glu Glu Asp 20 25 30

Trp Asp Arg Asp Leu Leu Leu Asp Pro Ala Trp Cys Asn Ser His Leu
35 40 45

Arg Lys Ala Gly Thr Gln lle Glu Asn lle Glu Glu Asp Phe Arg Asn 50 55 60

Gly Leu Lys Leu Met Leu Leu Leu Glu Val Ile Ser Gly Glu Arg Leu
65 70 75 80

Pro Arg Pro Asp Lys Gly Lys Met Arg Phe His Lys 11e Ala Asn Val 85 90 95

Asn Lys Ala Leu Asp Phe Ile Ala Ser Lys Gly Val Lys Leu Val Ser 100 105 110

lle Gly Ala Glu Glu lle Val Asp Gly Asn Leu Lys Met Thr Leu Gly 115 120 125

Met lle Trp Thr lle lle Leu Arg Phe Ala lle Gln Asp lle Ser Val 130 135 140

Glu Glu Thr Ser Ala Lys Glu Gly Leu Leu Leu Trp Cys Gln Arg Lys 145 150 155 160

Thr Ala Pro Tyr Arg Asn Val Asn Val Gln Asn Phe His Thr Ser Trp
165 170 175

Lys Asp Gly Leu Ala Leu Cys Ala Leu Ile His Arg His Arg Pro Asp 180 185 190

Leu lle Asp Tyr Ala Lys Leu Arg Lys Asp Asp Pro lle Gly Asn Leu 195 200 205

Asn Thr Ala Phe Glu Val Ala Glu Lys Tyr Leu Asp 11e Pro Lys Met

	210					215					220				
Leu	Asp	Лlа	Glu	Лѕр	lle	Val	Asn	Thr	Pro	Lys	Pro	Asp	Glu	Lys	Ala
225					230					235					240
He	Met	Thr	Tyr	Val	Ser	Cys	Phe	Tyr	His	Ala	Phe	Ala	Gly	Ala	Glu
				245					250					255	
Gln	Ala	Glu	Thr	Ala	Ala	Asn	Arg	He	Cys	Lys	Val	Leu	Ala	Val	Asn
			260					265					270		
Gln	Glu	Asn	Glu	Lys	Leu	Met	Glu	Glu	Tyr	Glu	Lys	Leu	Ala	Ser	Glu
		275					280					285			
Leu	Leu	Glu	Trp	He	Arg	Arg	Thr	Val	Pro	Trp	Leu	Glu	Asn	Arg	Val
	290					295					300				
Gly	Glu	Pro	Ser	Met	Ser	Ala	Met	Gln	Arg	Lys	Leu	Glu	Asp	Phe	Arg
305					310					315					320
Asp	Tyr	Arg	Arg	Leu	His	Lys	Pro	Pro	Arg	He	Gln	G]u	Lys	Cys	G1n
				325					330					335	
Leu	Glu	He	Asn	Phe	Asn	Thr	Leu	Gln	Thr	Lys	Leu	Arg	Leu	Ser	His
			340					345					350		
Arg	Pro		Phe	Met	Pro	Ser	Glu	Gly	Lys	Leu	Va]		Asp	He	Ala
		355					360					365			
Asn		Trp	Arg	Gly	Leu		Gln	Val	Glu	Lys		Tyr	Glu	Asp	Trp
	370		0.1			375		0.1			380				0.1
	Leu	Ser	Glu	He		Arg	Leu	GIn	Arg		GIn	His	Leu	Ala	
385	DI		C 1		390	C			C1	395	T	TI		C 1	400
Lys	rne	Arg	GIN		Ala	Ser	Leu	1115		Ala	Erp	ı n.r	Arg		Lys
C1	C1	Mot	Lau	405	C1n	Ana	Aan	Tur	410	Sar	Ala	Lou	Lou	415	Clu
Glu	010	Met	420	261	0111	A1 g	Asp	425	nsp	961	Ма	Leu	430	OIII	Olu
Val	Ανα	Λla		Lou	Ara	Ara	Hie		Ala	Phe	Glu	Ser		Len	Ala
, 41	мв	435	1.C u	Leu	na g	nı ş	440	Ola	MIG	THE	Ord	445	71.515	LCu	11161
Ala	His		Asp	Arø	Val	Glu	His	He	Ala	Ala	Leu		Gln	Glu	Leu
	450			3	-	455					460				
Asn		Leu	Asp	Tyr	His		Ala	Ala	Ser	Val	Asn	Ser	Arg	Cys	Gln
465			•	-	470					475			•	•	480
	He	Cys	Asp	G1n		Asp	Asn	Leu	Gly	Thr	Leu	Thr	Gln	Lys	
				485					490					495	
Aro	Asn	Ala	Leu	Glu	Ara	Met	Glu	Lve	الم ا	Leu	Glu	Thr	Tle	Asn	Gla

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Leu	Gln	Leu	Glu	Phe	Ala	Arg	Arg	Ala	Ala	Pro	Phe	Asn	Asn	Trp	Leu
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Asp	Gly	Ala	Val	Glu	Asp	Leu	Gl'n	Asp	Val	Trp	Leu	Val	His	Ser	Val
	530					535					540				
Glu	Glu	Thr	Gln	Ser	Leu	Leu	Thr	Ala	His	Asp	Gln	Phe	Lys	Ala	Thr
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Leu	Pro	Glu	Ala	Лѕр	Arg	Glu	Arg	Gly	Ala	He	Met	Gly	11e	Gln	Gly
				565					570					575	
Glu	He	Gln	Lys	He	Cys	G1n	Thr	Tyr	G1 y	Leu	Arg	Pro	Cys	Ser	Thr
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Asn	Pro	Tyr	Пе	Thr	Leu	Ser	Pro	Gln	Asp	He	Asn	Thr	Lys	Trp	Asp
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Met	Val	Arg	Lys	Leu	Val	Pro	Ser	Arg	Asp	Gln	Thr	Leu	Gln	Glu	Glju
	610					615					620				
Leu	Ala	Arg	Gln	Gln	Val	Asn	Glu	Arg	Leu	Arg	Arg	Gln	Phe	Ala	Ala
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Gln	Ala	Asn	Ala	Ile	Gly	Pro	Trp	lle	Gln	Ala	Lys	Val	Glu	Glu	Val
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Gly	Arg	Leu	Ala	Ala	Gly	Leu	Ala	Gly	Ser	Leu	Glu	Glu	Gln	Met	Ala
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Gly	Leu	Arg	Gln	Gln	Glu	Gln	Asn	He	He	Asn	Tyr	Lys	Thr	Asn	Пе
		675					680					685			
Asp	Arg	Leu	Glu	Gly	Asp	His	Gln	Leu	Leu	Gln	Glu	Ser	Leu	Val	Phe
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Asp	Ser	Lys	His	Thr	Val	Tyr	Ser	Met	Glu	His	He	Arg	Val	Gly	Trp
705					710					715					720
Glu	Gln	Leu	Leu	Thr	Ser	He	Ala	Arg	Thr	11e	Asn	Glu	Val	Glu	Asn
				725					730					735	
Gln	Val	Leu	Thr	Arg	Asp	Ala	Lys	Gly	Leu	Ser	Gln	Glu	Gln	Leu	Asn
			740					745					750		
Glu	Phe	Arg	Ala	Ser	Phe	Asn	His	Phe	Asp	Arg	Lys	Arg	Asn	Gly	Met
		755					760					765			
Met		Pro	Asp	Asp	Phe		Ala	Cys	Leu	He	Ser	Met	Gly	Tyr	Asp
	770					775					780				
Leu	Gly	Glu	Val	G1u	Phe	Ala	Arg	Пe	Met	Thr	Met	Val	Asp	Pro	Asn

Ala Ala Gly Val Val Thr Phe Gln Ala Phe Ile Asp Phe Met Thr Arg Glu Thr Ala Glu Thr Asp Thr Thr Glu Gln Val Val Ala Ser Phe Lys lle Leu Ala Gly Asp Lys Asn Tyr lle Thr Pro Glu Glu Leu Arg Arg Glu Leu Pro Ala Lys Gln Ala Glu Tyr Cys Ile Arg Arg Met Val Pro Tyr Lys Gly Ser Gly Ala Pro Ala Gly Ala Leu Asp Tyr Val Ala Phe Ser Ser Ala Leu Tyr Gly Glu Ser Asp Leu

⟨210⟩ 3756

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3756

Met Arg Cys Pro Pro Gly Ala Ser Leu Ala Ala Arg Gln Asp Leu Pro Ala Trp Asp Tyr Ser Met Arg Gly Arg Ser Gly Trp Ser Trp Cys Gly Ser Leu Ser Gln Pro Phe Leu Cys Ile Gly Ala Leu Pro Arg Arg His Leu Ser Cys Lys Arg Gly Glu Cys Asp Val Asp Thr Trp Ala Pro Gly Leu Ala Cys Val 11e Trp Ala Gly Pro His Lys His His Lys His Leu Phe His His Ala lle Asp Gly Cys Trp Ala Ala Gln Gly Cys Asp Val Glu Leu Gly Asn Pro Ala Trp Glu Gly Ser Ile Pro Gly Ala Ala

Phe Gln Lys Lys Asn Ser Leu His Gln Glu Gly Val Ala Glu Pro Gln

Ser Pro Arg Asn Leu Arg Glu Ala Pro Lys Gly Gly Leu Pro Glu Asp Thr His Pro Pro Tyr Leu Leu His Thr Gly Ser Ser Asn Gln Thr Val Trp Pro Lys Gln Pro Gly Tyr Phe His Leu Ser Gln Gln Pro Trp Ala Thr Leu Gly Met Val Pro Asn Met Ala Cys Ala Ala Val Thr Val Leu Arg Gly Leu Ala Ser Thr Gly Ser Phe Leu Leu Asp Gly Gly Thr Gly Ala Arg Ile Tyr Leu Leu Pro Tyr Ser Val Pro Ala Gln Pro Arg Ser Met Asp Pro Phe Thr Gly Cys Phe Ile Pro His Pro Pro Glu Leu Leu Gly Pro Leu Arg Cys Pro Gly Asp Gly Gly Ala Leu Cys Leu Cys Pro Val Ala Ala Ile Ala Ala Thr Thr Ser Thr Ser Ser Ala Gly Trp Pro Pro Gly Thr Ala Ser Pro Gly

<210> 3757

<211> 255

<212> PRT

<213> Homo sapiens

<400> 3757

 Met
 Met
 Ser
 11e
 Phe
 Leu
 Met
 Gly
 Cys
 Tyr
 Asp
 Pro
 Gly
 Ser
 Gln
 Lys

 1
 5
 10
 10
 15

 Trp
 Cys
 Thr
 Val
 Thr
 Lys
 Cys
 Ala
 Gly
 Gly
 His
 Asp
 Asp
 Ala
 Thr
 Leu

 Ala
 Arg
 Leu
 Gln
 Asn
 Glu
 Leu
 Asp
 Met
 Val
 Lys
 1le
 Ser
 Lys
 Asp
 Pro

 Ser
 Lys
 1le
 Pro
 Ser
 Trp
 Leu
 Lys
 Val
 Asn
 Lys
 1le
 Tyr
 Tyr
 Pro
 Asp

Phe Ile Val Pro Asp Pro Lys Lys Ala Ala Val Trp Glu Ile Thr Gly Ala Glu Phe Ser Lys Ser Glu Ala His Thr Ala Asp Gly Ile Ser Ile Arg Phe Pro Arg Cys Thr Arg 11e Arg Asp Asp Lys Asp Trp Lys Ser Ala Thr Asn Leu Pro Gln Leu Lys Glu Leu Tyr Gln Leu Ser Lys Glu Lys Ala Asp Phe Thr Val Val Ala Gly Asp Glu Gly Ser Ser Thr Thr Gly Gly Ser Ser Glu Glu Asn Lys Gly Pro Ser Gly Ser Ala Val Ser Arg Lys Ala Pro Ser Lys Pro Ser Ala Ser Thr Lys Lys Ala Glu Gly Lys Leu Ser Asn Ser Asn Ser Lys Asp Gly Asn Met Gln Thr Ala Lys Pro Ser Ala Met Lys Val Gly Glu Lys Leu Ala Thr Lys Ser Ser Pro Val Lys Val Gly Glu Lys Arg Lys Ala Ala Asp Glu Thr Leu Cys Gln Thr Lys Val Arg Val Lys Thr Ala Thr His His Val Gly Gln Phe Ser Pro Gly Cys Val Pro Asn Leu Leu Tyr Lys Lys Phe Glu Arg Gly

<210> 3758

<211> 202

<212> PRT

<213> Homo sapiens

<400> 3758

Met Asn Val Pro Arg Ser Gln Pro Ala Ser Lys Glu Leu Leu Lys Gly

1 5 10 15

Glu Leu Ser Met Tyr Asn Asn Glu Arg Arg Phe Arg lle Arg Ser Gln

Asp Ser Tyr Asn Pro Phe IIe Leu Leu Phe Phe Ser Arg Arg Ser Leu Ser Leu Ser Pro Arg Leu Glu Cys Ser Gly Val 11e Leu Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Arg Val Ala Gly lle Thr Val Ala Arg His His Ala Trp Leu lle Phe Val Phe Leu Val Glu Thr Gly Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly lle Thr Gly Val Ser His His Thr Arg Phe lle Leu Leu Phe Thr His Ser Ser Phe Asn Lys His Thr Val Glu Ile His Ile Ser Val Ser Ala Phe Asn His Arg Lys Ser Glu Leu Ser Thr Gln Leu Leu Met Cys Trp lle His Glu Lys Cys Ser Val Cys Phe Asn Leu Leu Ala Leu Lys Tyr Cys Met Gln Ser Val Gly Phe Asn Ser Leu

<210> 3759

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3759

 Met Ser Ala Ala Phe Pro Gly Ala Ser Leu Tyr Leu Pro Met Ala Gln

 1
 5
 10
 15

 Ser Val Ala Val Gly Pro Leu Gly Ser Thr Ile Pro Met Ala Tyr Tyr
 20
 25
 30

 Pro Val Gly Pro Ile Tyr Pro Pro Gly Ser Thr Val Leu Val Glu Gly

<210> 3760

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3760

 Met Gly His Lys Arg Glu Phe Arg Ala Pro Thr Leu Ala Ser Leu Glu

 1
 5
 10
 15

 Asn Cys Met Lys Leu Ser Gln Met Ala Val Gln Gly Leu Gln Gln Phe
 20
 25
 30

 Lys Ser Pro Leu Leu Gln Leu Pro His Ile Glu Glu Asp Asn Leu Arg
 35
 40
 45

 Arg Val Ser Asn His Lys Lys Tyr Lys Ile Lys Thr Ile Gln Asp Leu
 50
 55
 60

 Val Ser Leu Lys Glu Ser Asp Arg His Thr Leu Leu His Phe Leu Glu
 65
 70
 75
 80

 Asp Glu Lys Tyr Glu Glu Val Met Ala Val Leu Gly Ser Phe Pro Tyr
 85
 90
 95

Val Thr Met Asp Ile Lys Ser Gln Val Leu Asp Asp Glu Asp Ser Asn 100 105 110

Asn Ile Thr Val Gly Ser Leu Val Thr Val Leu Val Lys Leu Thr Arg 115 120 125

Gln Thr Met Ala Glu Val Phe Glu Lys Glu Gln Ser 11e Cys Ala Ala 130 135 140

Glu Glu Gln Pro Ala Glu Asp Gly Gln Gly Glu Thr Asn Lys Asn Arg

145					150					155					160
Thr	Lys	Gly	Gly	Trp	Gln	Gln	Lys	Ser	Lys	Gly	Pro	Lys	Lys	Thr	Ala
				165					170					175	
Lys	Ser	Lys	Lys	Lys	Lys	Pro	Leu	Lys	Lys	Lys	Pro	Thr	Pro	Val	Leu
			180					185					190		
Leu	Pro	Gln	Ser	Lys	Gln	Gln	Lys	Gln	Lys	Gln	Ala	Asn	Gly	Val	Val
		195					200					205			
G1 y	Λsn	Glu	Ala	Ala	Val	Lys	Glu	Asp	Glu	Glu	Glu	Val	Ser	Asp	Lys
	210					215					220				
Gly	Ser	Asp	Ser	Glu	Glu	Glu	Glu	Leu	Gln	Gln	Ser	Ile	Gln	Arg	Lys
225					230					235					240
G1 u	Arg	Ala	Leu	Leu	Glu	Thr	Lys	Ser	Lys	He	Thr	His	Pro	Val	Tyr
				245					250					255	
Ser	Leu	Tyr	Phe	Pro	Glu	Glu	Lys	Gln	Glu	Trp	Trp	Trp	Leu	Tyr	He
			260					265					270		
Ala	Asp	Arg	Lys	Glu	Gln	Thr	Leu	He	Ser	Met	Pro	Tyr	His	Val	Cys
		275					280					285			
Thr	Leu	Lys	Asp	Thr	Glu	Glu	Val	Glu	Leu	Lys	Phe	Pro	Ala	Pro	Gly
	290					295					300				
Lys	Pro	Gly	Asn	Tyr	Gln	Tyr	Thr	Val	Phe	Leu	Arg	Ser	Asp	Ser	Tyr
305					310					315					320
Met	Gly	Leu	Asp	Gln	He	Lys	Pro	Leu	Lys	Leu	Glu	Val	His	Glu	Ala
				325					330					335	
Lys	Pro	Val	Pro	Glu	Asn	His	Pro	Gln	Trp	Asp	Thr	Ala	11e	Glu	Gly
			340					345					350		
Asp	Glu	Asp	Gln	Glu	Asp	Ser	Glu	Gly	Phe	Glu	Asp	Ser	Phe	Glu	Glu
		355					360					365			
Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Asp							
	370					375									

<210> 3761

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3761

Met Val His Gly Thr Ala Ala Val Ala Leu Tyr Leu Asp Pro Leu Phe

Phe Leu Arg Arg Ser Phe Ala Leu Leu Pro Arg Leu Glu Cys Ser Gly 20 25

Ala 11e Leu Ala His Cys Lys Leu Arg Leu Gln Gly Ser Cys His Ser 40 45

Pro Ala Ser Gly Leu His Leu Ser Gly Ser Ser Asp Ser Pro Ala Ser 55 60

Ala Ser Ala Ser Trp Val Gln Ala Asn Leu Arg Leu Leu Asp Pro Ser 70 75 80 65

Asp Ser Pro Ala Ser Ala Ser Gln Leu Ala Gly Thr Thr Gly Val Arg 90

Asn His Ala Gln Leu lle Phe Val Phe Leu Val Glu Met Gly Phe His 100 105 110

His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Leu Arg 120

Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Arg His Arg Ala 135

Arg Pro Ser Val Ser Phe Lys Gln Gly Ser Gly Glu 145 150 155

<210> 3762

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3762

Met Ser Ser Thr Trp Gln Val Gly Cys Leu Phe Pro Asp 11e Ser Ser 1 10 15

Leu Phe Gln Ser Arg Arg Gly Arg Thr Lys Gly Ile Pro Thr Leu Gly 25

Gln Leu His Phe Thr Ala Phe Leu Lys Thr Leu Pro Arg Glu Leu Cys 35 45 40

Phe lle Ser Leu Ala Gly Thr Val Ser His Gly Gln Pro Trp Leu Gln

50 55 Arg Arg Leu Gly Val Leu Leu Phe Phe Lys Met Val Ser Cys Ser 75 70 Val Val Gln Phe Gly Val Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro 90 Pro Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Ser Ser Ser 105 Trp Asp Tyr Arg Pro Thr Pro Pro His Pro Ala Asn Phe Cys 11e Phe 115 120 125 Ser Arg Asp Gly Val Leu Pro Cys Trp Pro Ser Trp Ser Gln Thr Ala 130 135 140 Asp Leu Arg 145 <210> 3763 <211> 367 <212> PRT <213> Homo sapiens <400> 3763 Met Cys Gly Asp Gly Thr Asn Asp Val Gly Ala Leu Lys His Ala Asp 10 Val Gly Val Ala Leu Leu Ala Asn Ala Pro Glu Arg Val Val Glu Arg 20 25 Arg Arg Arg Pro Arg Asp Ser Pro Thr Leu Ser Asn Ser Gly 11e Arg 45 40 Ala Thr Ser Arg Thr Ala Lys Gln Arg Ser Gly Leu Pro Pro Ser Glu 55 60 Glu Gln Pro Thr Ser Gln Arg Asp Arg Leu Ser Gln Val Leu Arg Asp 70 75 80 65 Leu Glu Asp Glu Ser Thr Pro 11e Val Lys Leu Gly Asp Ala Ser 11e Ala Ala Pro Phe Thr Ser Lys Leu Ser Ser 11e Gln Cys 11e Cys His 100 105 110 Val 11e Lys Gln Gly Arg Cys Thr Leu Val Thr Thr Leu Gln Met Phe

		115					120					125			
Lys	He	Leu	Ala	Leu	Asn	Ala	Leu	Пе	Leu	Ala	Tyr	Ser	Gln	Ser	Val
	130					135					140				
Leu	Tyr	Leu	Glu	Gly	Val	Lys	Phe	Ser	Asp	Phe	Gln	Ala	Thr	Leu	Gln
145					150					155					160
Gly	Leu	Leu	Leu	Ala	Gly	Cys	Phe	Leu	Phe	He	Ser	Arg	Ser	Lys	Pro
				165					170					175	
Leu	Lys	Thr	Leu	Ser	Arg	Glu	Arg	Pro	Leu	Pro	Asn	Пe	Phe	Asn	Leu
			180					185					190		
Tyr	Thr	He	Leu	Thr	Val	Met	Leu	Gln	Phe	Phe	Val	His	Phe	Leu	Ser
		195					200					205			
Leu	Val	Tyr	Leu	Tyr	Arg	Glu	Ala	Gln	Ala	Arg	Ser	Pro	Glu	Lys	Gln
	210					215					220				
Glu	Gln	Phe	Val	Asp	Leu	Tyr	Lys	Glu	Phe	Glu	Pro	Ser	Leu	Val	Asn
225					230					235					240
Ser	Thr	Val	Tyr	lle	Met	Ala	Met	Ala	Met	Gln	Met	Ala	Thr	Phe	Ala
				245					250					255	
He	Asn	Tyr	Lys	Val	Arg	Pro	Gly	Pro	Cys	Pro	Asn	Ile	His	Cys	Leu
			260					265					270		
Pro	Thr	Gln	Pro	His	Pro	Met	Lys	Pro	Ser	Val	Pro	His	Pro	His	Arg
		275					280					285			
Ala	Arg	Pro	Ser	Trp	Arg	Ala	Cys	Pro	Arg	Thr	Ser	Pro	Trp	Cys	Gly
	290					295					300				
Val	Trp	Gln	Phe	His	Ser	Trp	Pro	Ser	Leu	Ala	Cys	Ser	Ser	Ala	Pro
305					310					315					320
Arg	Pro	Thr	Ser	Thr	Ala	Ser	Leu	Ala	Ser	Trp	Thr	Ser	Leu		Ser
				325					330					335	
Ser	Ser	Trp	Ser	Leu	Pro	Arg	Ser	Cys	Ser	Trp	Thr	Ser	Ala	Trp	Arg
			340					345					350		
Ser	Trp	Pro	Thr	Ala	Ser	Cys		Ser	Ser	Trp	Gly	Pro	Arg	Ser	
		355					360					365			

<210> 3764

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3764

Met Asn Arg Val Cys Pro Thr Cys Trp Arg Cys Ala Leu Pro Pro Ala 1 5 10 15

Ala Pro Gly Arg His Ser His Pro Phe Ser Asp Glu Glu Val Asp Val
20 25 30

Trp Arg Gln Arg Val His Ala Glu Ser Leu Leu Gln Thr Arg Leu Lys
35 40 45

Gly Gly Pro Gln Pro Leu Ser Gln Asn Val Ser Ser Val Ala Gly Ser 50 55 60

Ala Pro Glu Glu Gln Lys Gln Trp Pro Gly Val Cys Phe Gln Leu Cys 65 70 75 80

Ser Phe Leu Glu Ala Ser Gly Gly Cys Asp Gln Lys Ala Ala Leu Thr 85 90 95

Gly Gly Ser Thr Gln His Leu Gln Arg Pro Lys Ser Ser 100 105

<210> 3765

<211> 274

<212> PRT

<213> Homo sapiens

⟨400⟩ 3765

Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr Ser Gly

1 5 10 15

Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala Asp Leu 20 25 30

Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu Val Ala 35 40 45

Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met Asp Pro 50 55 60

Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys Trp Ser 65 70 75 80

Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln Leu Leu

Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg Tyr His Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu Val Glu Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe Val Ala Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe lle Trp Phe Leu Leu Leu Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys Glu Gln Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr Leu Asp Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr Ser Ser Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly Ser Ser Glu Gln Glu Asp Gly Glu Glu Ser Pro Ser Asp Gly Ser Pro lle Glu Leu Asp

<210> 3766

<211> 798

<212> PRT

<213> Homo sapiens

<400> 3766

Met Ile Val Ala Leu Arg Glu Ala Leu Thr Ser Thr Asn Pro Lys Ala I 5 10 15

Ala Leu Lys Ser Lys Ile Val Ala Glu Phe Arg Ser Gln Ala Leu Ile

			20					25					30		
Glu	Glu	Leu	Leu	Leu	Tyr	Lys	Arg	Ser	Glu	Asp	Gln	He	Glu	Leu	Lys
		35					40					45			
Glu	Lys	Gln	Leu	Ser	Thr	Met	Arg	Val	Asp	Val	Cys	Ser	Thr	Glu	Thr
	50					55					60				
Leu	Lys	Cys	Leu	Lys	Asp	Lys	Thr	Gly	Gly	Lys	Lys	Phe	Ser	Lys	G] u
65					70					75					80
Phe	Glu	Glu	Ala	Ser	Ser	Lys	Leu	Glu	Glu	Phe	Val	Asn	Gly	Leu	Asp
				85					90					95	
Lys	Gln	Val	Lys	Asn	Gly	Pro	Ser	Leu	Thr	Glu	Ala	Leu	Glu	Asn	Ala
			100					105					110		
Gly	He	Phe	Tyr	Glu	Ala	G1n	Tyr	Lys	Glu	Val	Lys	Val	Val	Ala	Asr
		115					120					125			
Ala	Tyr	Lys	Thr	Phe	Ala	Asn	Arg	Va1	Asn	Asn	Leu	Lys	Lys	Lys	Let
	130					135					140				
Asp	Gln	Leu	Lys	Ser	Thr	Leu	Pro	Asp	Pro	Glu	Glu	Ser	Pro	Val	Pro
145					150					155					160
Ser	Pro	Ser	Met		Ala	Pro	Ser	Pro	Thr	Gly	Ser	Glu	Ser		Phe
				165					170					175	
Gln	Gly	Met		Gly	Glu	Glu	Ser		Ser	Pro	Thr	Val	Glu	Ser	Glı
			180			_		185					190		
Lys	Ser		Thr	Pro	Glu	Pro	Val	Thr	Asp	Asn	Arg		Val	Glu	Asp
		195				0.1	200		61	0	,	205			0.3
Met		Leu	Ser	Asp	Val		Asp	Asp	61 y	Ser		He	He	Val	GIL
	210	,	C1	1	n	215	C1		C		220	C	TI	C	V . 1
	Arg	Lys	61 u	Lys		Ala	Glu	Lys	Ser			Ser	ınr	Ser	
225 Pro-	Т1	1	Dara	Ti	230	A	11.	C	1	235		C	Cua	The	240
FTO	1111	Lys	F10	245	Gju	ASII	He	Ser	250	мла	3e1	261	Cys	255	FIC
Vol	Dro	Va1	The		The	Ala	Thr	Pro		Lau	Pro	lve	Pro		Acr
vai	110	vai	260	Met	1111	мта	1111	265	110	Leu	110	ris	270	101	MSI
Thr	Ser	Len		Pro	Ser	Pro	Ala		Ala	Len	Pro	Asn		Ala	Asr
1111	5(1	275	., .,	110	JC,I	110	280	1,	71.11	120.01	11.5	285	120.0	Mid	71.51
Val	Asn		Ala	Lvs	He	Ser	Ser	He	Leu	Ser	Ser		Thr	Ser	Val
~	290			3 +2	-10	295					300				
Met		Aen	Thr	G1 v	Vol		Pro	Ala	Sor	Ara		Ser	Pro	Glv	The

305					310					315					320
Pro	Thr	Ser	Pro	Ser	Asn	Leu	Thr	Ser	Gly	Leu	Lys	Thr	Pro	Ala	Pro
				325					330					335	
Ala	Thr	Thr	Thr	Ser	His	Asn	Pro	Leu	Ala	Asn	He	Leu	Ser	Lys	Val
			340					345					350		
Glu	Пе	Thr	Pro	Glu	Ser	He	Leu	Ser	Ala	Leu	Ser	Lys	Thr	Gln	Thr
		355					360					365			
Gln	Ser	Ala	Pro	Ala	Leu	Gln	Gly	Leu	Ser	Ser	Leu	Leu	Gln	Ser	Val
	370					375					380				
Thr	Gly	Asn	Pro	Val	Pro	Ala	Ser	Glu	Ala	Ala	Ser	Gln	Ser	Thr	Ser
385					390					395					400
Ala	Ser	Pro	Ala	Asn	Thr	Thr	Val	Ser	Thr	lle	Lys	Gly	Arg	Asn	Leu
				405					410					415	
Pro	Ser	Ser	Ala	Gln	Pro	Phe	Пе	Pro	Lys	Ser	Phe	Asn	Tyr	Ser	Pro
			420					425					430		
Asn	Ser	Ser	Thr	Ser	Glu	Val	Ser	Ser	Thr	Ser	Ala	Ser	Lys	Ala	Ser
		435					440					445			
Ile	Gly	Gln	Ser	Pro	Gly	Leu	Pro	Ser	Thr	Thr	Phe	Lys	Leu	Pro	Ser
	450					455					460				
Asn	Ser	Leu	Gly	Phe	Thr	Ala	Thr	His	Asn	Thr	Ser	Pro	Ala	Ala	Pro
465					470					475					480
Pro	Thr	Glu	Val	Thr	He	Cys	Gln	Ser	Ser	Glu	Val	Ser	Lys	Pro	Lys
				485					490					495	
Leu	Glu	Ser	Glu	Ser	Thr	Ser	Pro	Ser	Leu	Glu	Met	Lys	Пе	His	Asn
			500					505					510		
Phe	Leu	Lys	Gly	Asn	Pro	Gly	Phe	Ser	Gly	Leu	Asn	Leu	Asn	He	Pro
		515					520					525			
He	Leu	Ser	Ser	Leu	Gly	Ser	Ser	Ala	Pro	Ser	Glu	Ser	llis	Pro	Ser
	530					535					540				
Asp	Phe	Gln	Arg	Gly	Pro	Thr	Ser	Thr	Ser	He	Asp	Asn	He	Asp	Gly
545					550					555					560
Thr	Pro	Val	Arg	Asp	Glu	Arg	Ser	Gly	Thr	Pro	Thr	Gln	Asp	Glu	Met
				565					570					575	
Met	Asp	Lys	Pro	Thr	Ser	Ser	Ser	Val	Asp	Thr	Met	Ser	Leu	Leu	Ser
			580					585					590		
lvc	110	116	Sor	Pro	G1v	Sar	San	Thr	Pro	Sor	Sor	The	Arc	Sor	Pro

Pro Pro Gly Arg Asp Glu Ser Tyr Pro Arg Glu Leu Ser Asn Ser Val Ser Thr Tyr Arg Pro Phe Gly Leu Gly Ser Glu Ser Pro Tyr Lys Gln Pro Ser Asp Gly Met Glu Arg Pro Ser Ser Leu Met Asp Ser Ser Gln Glu Lys Phe Tyr Pro Asp Thr Ser Phe Gln Glu Asp Glu Asp Tyr Arg Asp Phe Glu Tyr Ser Gly Pro Pro Pro Ser Ala Met Met Asn Leu Glu Lys Lys Pro Ala Lys Ser Ile Leu Lys Ser Ser Lys Leu Ser Asp Thr Thr Glu Tyr Gln Pro 11e Leu Ser Ser Tyr Ser His Arg Ala Gln Glu Phe Gly Val Lys Pro Ala Phe Pro Pro Ser Val Arg Ala Leu Leu Asp Ser Ser Glu Asn Cys Asp Arg Leu Ser Ser Ser Pro Gly Leu Phe Gly Ala Phe Ser Val Arg Gly Asn Glu Pro Gly Ser Asp Arg Ser Pro Ser Pro Lys His Pro Cys Arg Ser His Gly Ser Pro Thr His Val Arg Arg Gly Glu Ser Pro Gly Leu His His Phe His His Val Asp Asp

<210> 3767

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3767

Met Ala Ala Thr Asn Leu Glu Asn Gln Leu His Ser Ala Gln Lys Asn

1 5 10 15

Leu	Leu	Phe	Leu	Gln	Arg	Glu	His	Ala	Ser	Thr	Leu	Lys	Gly	Leu	His
			20					25					30		
Ser	Glu	11e	Arg	Arg	Leu	Gln	Gln	His	Cys	Thr	Asp	Leu	Thr	Tyr	Glu
		35					40					45			
Leu	Thr	Val	Lys	Ser	Ser	Glu	Gln	Thr	Gly	Asp	G1 y	Thr	Ser	Lys	Ser
	50					55					60				
Ser	Glu	Leu	Lys	Lys	Arg	Cys	Glu	Glu	Leu	Glu	Ala	Gln	Leu	Lys	Val
65					70					75					80
Lys	Glu	Asn	Glu	Asn	Ala	Glu	Leu	Leu	Lys	Glu	Leu	Glu	Gln	Lys	Asn
				85					90					95	
Ala	Met	lle	Thr	Val	Leu	Glu	Asn	Thr	He	Lys	Glu	Arg	Glu	Lys	Lys
			100					105					110		
Tyr	Leu	Glu	Glu	Leu	Lys	Ala	Lys	Ser	His	Lys	Leu	Thr	Leu	Leu	Ser
		115					120					125			
Ser	Glu	Leu	Glu	Gln	Arg	Ala	Ser	Thr	He	Ala	Tyr	Leu	Thr	Ser	Gln
	130					135					140				
Leu	His	Ala	Ala	Lys	Lys	Lys	Leu	Met	Ser	Ser	Ser	Gly	Thr	Ser	Asp
145					150					155					160
Ala	Ser	Pro	Ser	Gly	Ser	Pro	Val	Leu	Ala	Ser	Tyr	Lys	Pro	Ala	Pro
,				165					170					175	
Pro	Lys	Asp	Lys	Leu	Pro	Glu	Thr	Pro	Arg	Arg	Arg	Met	Lys	Lys	Ser
			180					185					190		
Leu	Ser	Ala	Pro	Leu	His	Pro	Glu	Phe	G] u	Glu	Val	Tyr	Arg	Phe	Gly
		195					200					205			
Ala	Glu	Ser	Arg	Lys	Leu	Leu	Leu	Arg	Glu	Pro	Val	Asp	Ala	Met	Pro
	210					215					220				
	Pro	Thr	Pro	Phe		Leu	Ala	Arg	Glu		Ala	Glu	Val	His	
225					230					235					240
He	Lys	Glu	Arg		Leu	Val	He	Pro	Pro	He	Ala	Ser	Asp		Ser
				245					250	_				255	
Gly	Glu	Gln		Ser	Pro	Ala	Arg		Lys	Pro	His	Lys		His	Val
			260					265					270		
G1 y	Val		His	Arg	He	His		Ala	Thr	Pro	Pro		Ala	GIn	Pro
		275					280					285			
GIu		Lys	Thr	Leu	Ala		Asp	GIn	Va]	Asn		G1 y	Lys	Val	Va]
	290					295					300				

Arg Lys His Ser Gly Thr Asp Arg Thr Val 305 310

<210> 3768

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3768

Met Thr Arg Ala Val Asn Leu Ser Cys Glu Thr Thr Glu Gly Glu Thr
1 5 10 15

Thr Phe Ser Lys Asn Arg Ala Gln Thr Val Pro Val Ser Leu Ser Pro 20 25 30

Asn Cys Ser Met Ala Trp Ser Ala Ala Asn Val Ser Ala Ala Leu Lys 35 40 45

Gly Lys Ala Leu Leu Trp Ser Gln His Ala Glu Leu Ala Ser Thr Pro 50 55 60

Leu Arg Ala Ala Pro His Gln His Trp Leu Gly Leu Asn Leu Ser Ser
65 70 75 80

Leu Ala Pro Arg Cys Lys Pro Trp Asn Ala Asn Pro Lys Gly Gln Thr
85 90 95

Pro Arg Gly Ser Gln Val Pro Gly Ala Asp Thr Phe Leu Ala Leu Ala 100 105 110

Val Met Ala Gln Met Glu Ala Lys Thr Thr Pro Leu Ser Thr Gly Arg 115 120 125

Leu Val Leu Leu Pro Arg Glu Gln Glu Pro Arg His Arg Leu Cys Thr 130 135 140

Glu Phe Ser lle Tyr Phe Ser Gln Gly Gly Tyr Ala Lys Ala Val Cys 145 150 155 160

Leu Ser Leu Ser Gly Ser His Leu Gln Pro Val Pro Val Asp Ser Val
165 170 175

Gly Ser Thr Val Met Leu Gly Lys Asp Pro Asn Thr Arg Thr Lys His 180 185 190

Val Asp Ser Cys Gln Cys Gln Asn Gly Arg Lys Gln Gly Lys Gly Ser 195 200 205

Trp Leu Arg Pro Phe Ala Asn Arg Val Gln Arg Cys Arg His Leu Glu Pro Ala Arg Ser Tyr Gln Thr Gly Ser His Leu Cys Leu Gln Arg Leu Leu Ser Gln Arg Gln Asp Arg Gly Ala Trp Leu Cys Gln Val Ser Phe Trp Asp Glu Pro Ile Leu Leu Ser Gln Val Gly His Asp Gly Glu Ala Arg Arg

<210> 3769

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3769

Met Arg Asn His Phe Lys Phe Leu Ser Lys Lys Asp Lys Met Ala Ala

Ala Arg Arg Arg Ala Trp Arg Glu Gly Glu Arg Ala Ala Gly Ser Leu

Thr Arg Gly Leu Gln Leu Glu Pro Trp His Trp Gln Gly Ala Trp Arg

Arg Lys Arg Arg Lys Thr Val Ser Arg Gln Asp His Pro Asn Arg Ser

Ser Lys Leu Pro Trp Thr Ser Leu Pro Cys Pro His Arg Glu Ala Ala

Gly Asp Arg Ala Tyr Leu Gly Asn Thr Asn His Gly Ser Asp Thr Ser

Glu Met Ser Cys Arg Ala Ser Ala Ser Thr Leu Ile Gln Thr Leu Ser

Phe Ser Glu Leu Leu Gln Ala Pro Gly

<210> 3770 <211> 147 <212> PRT <213> Homo sapiens <400> 3770 Met Gly Gln Val Trp Asn Leu Gly Ala Cys Gln Lys Gly Glu Arg Leu Cys Gly Gln Thr His Leu Ala Cys Asn Pro Pro Leu Asn Ala Met His 20 25 30 Val Thr Leu Gly Ala Ser Leu Asn Phe Cys Gly His Gln Cys Pro His 35 40 45 Leu Gln Lys Cys Lys Trp Gln His Leu Phe Arg 11e Phe Leu 11e Arg 55 60 lle Asp Glu lle Leu Leu Lys lle Ser Ser Thr Trp Gly Ala Pro Arg 65 70 75 80 Lys Ala Ser Ser Tyr His Phe Phe Asn Ala Ser Ser Ser Trp Val Ser 90 Lys Thr Ser Ile Ser Gln Pro Phe Pro Cys Leu Gln Asn Thr Gln Asn 100 105 110 Met Ala Leu Phe Val Trp His Arg Gly Met Trp Arg Gln Glu Val Ser 115 120 125 Gly Gly Tyr Val Gly Cys Arg Cys Pro Ser Ser Cys Ser Leu Gly Ala 130 135 140 lle Pro Gly 145 <210> 3771 <211> 113 <212> PRT <213> Homo sapiens <400> 3771

Met Cys Val Cys Met Ser Leu Thr Ser Ile Ser Gly Arg Val Thr Lys

10

15

5

l

Asn Leu Ser Ile His Pro Arg Gln Gln Gly Cys Phe Ile Leu Arg Ala 25 Arg Leu Gly Phe Glu Gly Asp Phe lle Arg Met Glu Ser Leu Trp Leu 40 45 Thr Asn Asn Cys Leu Leu Lys Tyr Gln Ala Leu Leu Leu Lys Gly Ser 50 55 60 Ala Val Gln Leu Lys Thr Cys Pro Cys Leu Ser Pro Ala Thr Phe Ser 70 75 Gln Arg Lys Leu Glu Asn Leu Asn Met Ile Val Asn Arg Met Ala Ser 90 Gly Gly Leu Gly Leu Leu Gly Glu Thr Glu Asn Ala Pro Gln Ile Pro 100 105 110 Phe

<210> 3772

<211> 850

<212> PRT

<213> Homo sapiens

<400> 3772

Met Ile Ala Asn Ile Ser Pro Ser His Val Ala Thr Glu His Thr Leu

1 5 10 15

Asn Thr Leu Arg Tyr Ala Asp Arg Val Lys Glu Leu Lys Lys Gly 11e 20 25 30

Lys Cys Cys Thr Ser Val Thr Ser Arg Asn Arg Thr Ser Gly Asn Ser 35 40 45

Ser Pro Lys Arg Ile Gln Ser Ser Pro Gly Ala Leu Ser Glu Asp Lys 50 55 60

Cys Ser Pro Lys Lys Val Lys Leu Gly Phe Gln Gln Ser Leu Thr Val 65 70 75 80

Ala Ala Pro Gly Ser Thr Arg Gly Lys Val His Pro Leu Thr Ser His
85 90 95

Pro Pro Asn Ile Pro Phe Thr Ser Ala Pro Lys Val Ser Gly Lys Arg 100 105 110

Gly	Gly	Ser 115	Arg	Gly	Ser	Pro	Ser 120	Gln	Glu	Trp	Val	11e 125	His	Ala	Ser
Pro	Val 130	Lys	G1y	Thr	Va]	Arg 135	Ser	Gly	His	Va]	Ala 140	Lys	Lys	Lys	Pro
Glu	Glu	Ser	Ala	Pro	Leu	Cys	Ser	Glu	Lys	Asn	Arg	Met	Gly	Asn	Lys
145					150					155					160
Thr	Val	Leu	Gly	Trp	Glu	Ser	Arg	Ala	Ser	Gly	Pro	Gly	Glu	Gly	Leu
				165					170					175	
Val	Arg	Gly	Lys	Leu	Ser	Thr	Lys	Cys	Lys	Lys	Val	Gln	Thr	Val	Gln
			180					185					190		
Pro	Val	Gln	Lys	Gln	Leu	Val	Ser	Arg	Val	Glu	Leu	Ser	Phe	Gly	Asn
		195					200					205			
Ala		His	Arg	Ala	Glu		Ser	Gln	Asp	Ser	Gln	Arg	Gly	Thr	Pro
	210					215					220				
	Arg	Pro	Ala	Ser	Glu	Ala	Trp	Thr	Asn		Pro	Pro	His	Gln	
225					230			_		235					240
Glu	Arg	Glu	Glu		Leu	Arg	Phe	Tyr		GIn	GIn	Phe	GIn		Pro
n		,	0.1	245	,			Tr.	250	D				255	
Pro	Leu	Leu		GIn	Lys	Leu	Lys		GIn	Pro	Leu	Lys		Ser	Leu
A 20.00	C1.5	Т	260	Dag	Duo	C1	C1	265	Lau	Thu	A	C1	270	Duo	Dwo
AI g	GIII	275	ΛI g	110	Pro	Giu	280	OIII	Leu	1111	ASII	285	1111	110	110
Len	Phe		Ser	Tyr	Ser	Glu		His	Asn	Glv	Ala		Val	Glu	Glu
Leu	290	1113	561	1,1	561	295	71.511	1113	пор	01,	300	0111	va,	0.14	014
Leu		Asp	Ser	Asp	Phe		Glu	Asp	Ser	Phe		llis	lle	Phe	Ser
305					310					315					320
	Arg	Ala	Thr	Lys	Gln	Arg	Asn	Thr	Leu		Asn	Ser	Glu	Asp	
				325					330					335	
Phe	Phe	Leu	His	Gln	Thr	Trp	Gly	Gln	Gly	Pro	Glu	Lys	Gln	Val	Ala
			340					345					350		
Glu	Arg	Gln	Gln	Ser	Leu	Phe	Ser	Ser	Pro	Arg	Thr	Gly	Asp	Lys	Lys
		355					360					365			
Asp	Leu	Thr	Lys	Ser	Trp	Val	Asp	Ser	Arg	Asp	Pro	Пе	Asn	His	Arg
	370					375					380				
Arg	Ala	Ala	Leu	Asp	His	Ser	Cys	Ser	Pro	Ser	Lys	Gly	Pro	Val	Asp
385					390					395					400

Trp	Ser	Arg	Glu	Asn	Ser	Ihr	Ser	Ser	Gly	Pro	Ser	Pro	Arg	Asp	Ser
				405					410					415	
Leu	Ala	Glu	Lys	Pro	Tyr	Cys	Ser	Gln	Val	Asp	Phe	He	Tyr	Arg	Gln
			420					425					430		
Glu	Arg	Gly	Gly	Gly	Ser	Ser	Phe	Asp	Leu	Arg	Lys	Asp	Ala	Ser	Gln
		435					440					445			
Ser	Glu	Val	Ser	Gly	Glu	Asn	Glu	Gly	Asn	Leu	Pro	Ser	Pro	Glu	Glu
	450					455					460				
Asp	Gly	Phe	Thr	lle	Ser	Leu	Ser	His	Val	Ala	Val	Pro	Gly	Ser	Pro
465					470					475					480
Asp	Gln	Arg	Asp	Thr	Va]	Thr	Thr	Pro	Leu	Arg	Glu	Val	Ser	Ala	Asp
				485					490					495	
Gly	Pro	He	GIn	Va]	Thr	Ser	Thr	Val	Lys	Asn	Gly	His	Ala	Val	Pro
			500					505					510		
Gly	Glu	Asp	Pro	Arg	Gly	Gln	Leu	Gly	Thr	His	Ala	Glu	Tyr	Ala	Ser
		515					520					525			
Gly	Leu	Met	Ser	Pro	Leu	Thr	Met	Ser	Leu	Leu	Glu	Asn	Pro	Asp	Asn
	530					535					540				
Glu	Gly	Ser	Pro	Pro	Ser	Glu	Gln	Leu	Val	Gln	Asp	Gly	Ala	Thr	His
545					550					555					560
Ser	Leu	Val	Ala	Glu	Ser	Thr	Gly	Gly	Pro	Val	Val	Ser	His	Thr	Val
				565					570					575	
Pro	Ser	Gly	Asp	Gln	Glu	Ala	Ala	Leu	Pro	Va1	Ser	Ser	Ala	Thr	Arg
			580					585					590		
His	Leu	Trp	Leu	Ser	Ser	Ser	Pro	Pro	Asp	Asn	Lys	Pro	Gly	Gly	Asp
		595					600					605			
Leu	Pro	Ala	Leu	Ser	Pro	Ser	Pro	He	Arg	Gln	His	Pro	Ala	Asp	Lys
	610					615					620				
Leu	Pro	Ser	Arg	Glu	Ala	Asp	Leu	Gly	Glu	Ala	Cys	Gln	Ser	Arg	Glu
625					630					635					640
Thr	Val	Leu	Phe	Ser	llis	Glu	His	Met	Gly	Ser	Glu	Gln	Tyr	Asp	Ala
				645					650					655	
Asp	Ala	Glu	Glu	Thr	Gly	Leu	Asp	Gly	Ser	Trp	61 y	Phe	Pro	Gly	Lys
			660					665					670		
Pro	Phe	Thr	Thr	lle	His	Met	Gly	Val	Pro	His	Ser	Gly	Pro	Thr	Leu
		675					680					685	•		

Thr Pro Arg Thr Gly Ser Ser Asp Val Ala Asp Gln Leu Trp Ala Gln Glu Arg Lys His Pro Thr Arg Leu Gly Trp Gln Glu Phe Gly Leu Ser Thr Asp Pro 11e Lys Leu Pro Cys Asn Ser Glu Asn Val Thr Trp Leu Lys Pro Arg Pro lle Ser Arg Cys Leu Ala Arg Pro Ser Ser Pro Leu Val Pro Ser Cys Ser Pro Lys Thr Ala Gly Thr Leu Arg Gln Pro Thr Leu Glu Gln Ala Gln Gln Val Val Ile Arg Ala His Gln Glu Gln Leu Asp Glu Met Ala Glu Leu Gly Phe Lys Glu Glu Thr Leu Met Ser Gln Leu Ala Ser Asn Asp Phe Glu Asp Phe Val Thr Gln Leu Asp Glu Ile Met Val Leu Lys Ser Lys Cys Ile Gln Ser Leu Arg Ser Gln Leu Gln Leu Tyr Leu Thr Cys His Gly Pro Thr Ala Ala Pro Glu Gly Thr Val Pro Ser

<210> 3773

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3773

Met Arg Gly Leu Pro Val Cys Leu Ala Gln Asn Ser Ser Pro Ala Pro Val Asn Thr Trp Leu Ala Thr Ala Leu Lys Pro Arg Gly Leu Ser Thr Thr Pro Gly Gly Gly Leu Lys Arg Lys Gly Gln Lys Gln Val Ala

Ser Ala Gly Gln Val Gln Trp Gly Phe Ser Gln Thr His Thr Ile Lys Cys Val Cys Arg Leu Thr Val Ser Pro Ala Gly Gly Phe Gln Gly Pro Pro Val Ser Leu Leu Ser Trp Asp Met Tyr Leu Leu Ile Met Pro Leu Ser Met Leu Trp Leu Met

<210> 3774 <211> 243 <212> PRT

<213> Homo sapiens

<400> 3774 ⋅ Met Met Gly Ser Arg Arg Lys Val Leu Leu Thr Ser Gln Met Gly Gln Leu Gly Lys Gly Ala Pro His Phe Pro Asp Gly Val Ala Val Arg Gln Arg Cys Ser Ser Gln Pro Arg Gly Ser Gln Ala Val Ala Leu Leu Thr Ser Gln Thr Gly Leu Pro Gly Arg Gly Ala Pro His Phe Pro Glu Gly Val Ala Gly Gln Arg Arg Ser Ser Thr Ala Arg Leu Gly Ser Arg Gln Glu Glu Leu Leu Thr Ser Lys Met Met Gly Gly Arg Ala Glu Ala Leu Pro Thr Ser Gln Thr Gly Arg Pro Gly Arg Gly Ala Pro His Leu Pro Asp Arg Val Ala Gly Gln Arg Arg Ser Ser Pro Pro Arg Arg Gly

Gly Arg Ala Glu Ala Leu His Thr Ser Gln Met Gly Trp Trp Pro Asp

Arg Gly Ala Pro His Asn Leu Asp Gly Ala Ala Gly Gln Arg His Ser

Pro Leu Pro Arg Arg Gly Ser Arg Ala Glu Trp Pro Gly Arg Gly Thr Pro His Asn Pro Asp Gly Ala Ala Gly Gln Arg Arg Ser Ser Pro Pro Arg Trp Gly Ser Arg Glu Glu Ala Leu Leu Thr Ser Gln Thr Leu Gly Gly Gln Ala Glu Ala Leu Leu Thr Ser Gln Met Gly Trp Leu Gly Arg Gly Ala Pro His Phe Pro Asp Lys Val Ala Gly Gln Arg Arg Tyr Ser Pro Pro Arg

<210> 3775

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3775

Met Gly Glu Thr Gln Gly Pro Gly Pro Gln Phe Ser Val Leu Cys Pro Ser Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp Ser Thr lle lle Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu 11e Glu lle Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala

Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu lle Tyr Lys Gln Pro Ala Val Glu Val Pro Gln Tyr Val Gly Ile Arg Leu Leu Val Glu Gly Phe Thr Ile Lys Lys Pro Met Ala Met Cys His Arg Arg Met Gly Val Arg Pro Ala Val Pro Leu Leu Thr Gln Arg Gly Ser Gly Glu Ala Glu Val Ser Gly Ser Leu Arg Lys Leu Pro Lys Val Ala Gln Leu Arg Arg Gly Thr Ala Gly Met Gln Thr Gln Pro Val Thr Thr Ser Pro Ala Ser Thr Pro Arg Pro Ser Cys Leu Leu Pro Met Tyr Ser Asp Thr Arg Ala Arg Ser Ser Asp Asp Ser Thr Ala Ser Trp Trp Ala Leu Arg Pro Cys Arg Pro Gln Ala Arg Pro

<210> 3776

<211> 470

<212> PRT

<213> Homo sapiens

<400> 3776

 Met Asn Glu Glu Asn Glu Asn Ile Asp Gly Thr Asn Gly Cys Ser Lys Val Arg

 1
 5
 10
 15

 Thr Gly Ile Gln Asn Glu Ala Ala Leu Leu Ala Leu Met Glu Lys Thr
 20
 25
 30

 Gly Tyr Asn Met Val Gln Glu Asn Gly Gln Arg Lys Phe Gly Gly Pro
 45

 Pro Pro Gly Trp Glu Gly Pro Pro Pro Pro Arg Gly Cys Glu Val Phe

 50
 55
 60

vai	ыу	Lys	He	Pro	Arg	Asp	мет	Lyr	GIU	Asp	Glu	Leu	val	Pro	Val
65					70					75					80
Phe	Glu	Arg	Ala	Gly	Lys	11e	Tyr	Glu	Phe	Arg	Leu	Met	Met	Glu	Phe
				85					90					95	
Ser	G] y	Glu	Asn	Arg	Gly	Tyr	Ala	Phe	Val	Met	Tyr	Thr	Thr	Lys	Glu
			100					105					110		
Glu	Ala	Gln	Leu	Ala	lle	Λrg	lle	Leu	Asn	Asn	Tyr	Glu	He	Arg	Pro
		115					120					125			
Gly	Lys	Phe	lle	Gly	Val	Cys	Val	Ser	Leu	Asp	Asn	Cvs	Arg	Leu	Phe
•	130					135					140	·			
lle		Ala	11e	Pro	Lvs	Glu	Lvs	Lvs	Lvs	Glu		He	Leu	Asp	Glu
145	•				150		•	-	•	155				·	160
	Lvs	Lvs	Val	Thr		Gly	Val	Val	Asp		Пе	Val	Tyr	Pro	
	·	•		165		·			170					175	
Ala	Thr	Asp	Lys		Lvs	Asn	Arg	Gly		Ala	Phe	Val	Glu		Glu
		•	180		•			185					190	-	
Ser	His	Arg		Ala	Ala	Met	Ala		Arg	Lys	Leu	He	Pro	Gly	Thr
		195					200	Ū	Ŭ	•		205		•	
Phe	Gln	Leu	Trp	Gly	His	Thr	He	Gln	Val	Asp	Trp	Ala	Asp	Pro	Glu
	210		·			215				·	220		·		
Lys		Val	Asp	G]u	Glu	Thr	Met	Gln	Arg	Val	Lys	Val	Leu	Tyr	Val
225			•		230					235	·			·	240
Arg	Asn	Leu	Met	He	Ser	Thr	Thr	Glu	Glu	Thr	Пe	Lys	Ala	Glu	Phe
				245					250					255	
Asn	Lys	Phe	Lys	Pro	Gly	Ala	Val	Glu	Arg	Val	Lys	Lys	Leu	Arg	Asp
			260					265					270		
Tyr	Ala	Phe	Val	His	Phe	Phe	Asn	Arg	Glu	Asp	Ala	Val	Ala	Ala	Met
		275					280					285			
Ser	Val	Met	Asn	Gly	Lys	Cys	He	Asp	G1 y	Ala	Ser	He	Glu	Va.l	Thr
	290					295					300				
Leu	Ala	Lys	Pro	Val	Asn	Lys	Glu	Asn	Thr	Trp	Arg	Gln	His	Leu	Asn
305					310					315	-				320
	GIn	He	Ser	Pro	Asn	Ser	Glu	Asn	Leu	Пе	Va]	Phe	Ala	Asn	
				325					330					335	
Glu	Glu	Ser	His	Pro	Lys	Thr	Leu	Gly	Lys	Leu	Pro	Thr	Leu	Pro	Ala
Glu	Glu	Ser	His	Pro	Lys	Thr	Leu	Gly	Lys	Leu	Pro	Thr	Leu	Pro	Э

			340					345					350		
Arg	Leu	Asn	Gly	Gln	His	Ser	Pro	Ser	Pro	Pro	Glu	Val	Glu	Arg	Cys
		355					360					365			
Thr	Tyr	Pro	Phe	Tyr	Pro	Gly	Thr	Lys	Leu	Thr	Pro	He	Ser	Met	Tyr
	370					375					380				
Ser	Leu	Lys	Ser	Asn	His	Phe	Asn	Ser	Ala	Val	Met	His	Leu	Asp	Tyr
385					390					395					400
Tyr	Cys	Asn	Lys	Asn	Asn	Trp	Ala	Pro	Pro	Glu	Tyr	Tyr	Leu	Tyr	Ser
				405					410					415	
Thr	Thr	Ser	Gln	Asp	Gly	Lys	Val	Leu	Leu	Val	Tyr	Lys	He	Val	He
			420					425					430		
Pro	Ala	He	Ala	Asn	Gly	Ser	Gln	Ser	Tyr	Phe	Met	Pro	Asp	Lys	Leu
		435					440					445			
Cys	Thr	Thr	Leu	Glu	Asp	Ala	Lys	Glu	Leu	Ala	Ala	Gln	Phe	Thr	Leu
	450					455					460				
Leu	His	Leu	Gly	Pro	Phe										
465					470										

<210> 3777

<211> 382

<212> PRT

<213> Homo sapiens

<400> 3777

Met Phe Cys Leu Glu Ala Ile Val Lys His Ser Glu Ile Ser Thr His 10 Cys Asp Lys Ile Glu Ala Asn Gly Gly Leu Gln Leu Leu Gln Arg Leu 20 25 30 Tyr Arg Leu His Lys Asp Cys Pro Lys Val Gln Arg Asn lle Met Arg 35 40 45 Val 11e Gly Asn Met Ala Leu Asn Glu His Leu His Ser Ser 11e Val 60 55 Arg Ser Gly Trp Val Ser lle Met Ala Glu Ala Met Lys Ser Pro His 65 70 75 lle Met Glu Ser Ser His Ala Ala Arg lle Leu Ala Asn Leu Asp Arg

				85					90					95	
Glu	Thr	Val	Gln	Glu	Lys	Tyr	Gln	Asp	Gly	Val	Tyr	Val	Leu	His	Pro
			100					105					110		
Gln	Tyr	Arg	Thr	Ser	Gln	Pro	Пе	Lys	Ala	Λsp	Val	Leu	Phe,	He	His
		115					120					125			
Gly	Leu	Met	Gly	Ala	Ala	Phe	Lys	Thr	Trp	Arg	Gln	Gln	Asp	Ser	Glu
	130					135					140				
Gln	Ala	Val	He	Glu	Lys	Pro	Met	Glu	Asp	Glu	Asp	Arg	Tyr	Thr	Thr
145					150					155					160
Cys	Trp	Pro	Lys	Thr	Trp	Leu	Ala	Lys	Asp	Cys	Pro	Ala	Leu	Arg	He
				165					170					175	
He	Ser	Val	Glu	Tyr	Asp	Thr	Ser	Leu	Ser	Asp	Trp	Arg	Ala	Arg	Cys
			180					185					190		
Pro	Met		Arg	Lys	Ser	He	Ala	Phe	Arg	Ser	Asn	Glu	Leu	Leu	Arg
		195					200					205			
Lys		Arg	Ala	Ala	Gly		Gly	Asp	Arg	Pro		Val	Trp	He	Ser
	210					215			_		220				
	Ser	Met	Gly	Gly		Leu	Val	Lys	Lys		Leu	Leu	Glu	Ala	
225			0.1		230	an i				235	mı.		0.1	- 0.	240
Thr	Lys	Pro	Glu	Met	Ser	Thr	Val	He		Asn	Thr	Arg	Gly		11e
nı .	т.	C	37.3	245	11.		C1	C .	250		4.1	C1	т.	255	v i
rne	lyr	Ser		Pro	nis	ms	GIV		Arg	Leu	Ala	614		261	val
Aan	110	Ana	260	Lou	Lou	Dho	Dao	265	Lou	Clu	Val	Luc	270	ييم ا	Can
ASII	116	275	1 9.1	Leu	Leu	rne	280	261	Leu	Giu	val	285	GIU	Leu	261
lve	Asn		Pro	Λla	leu	Lve		Len	Gln	Asn	Asn		Leu	Glu	Phe
Lys	290	501	110	15 T G	EC G	295	1111	Lou	0.111	пор	300	THE	Lcu	Old	THE
Ala		Asp	Lvs	Asn	Phe		Val	Leu	Asn	Phe		Glu	Thr	Leu	Pro
305					310					315					320
	Tyr	He	Gly	Ser	Met	lle	Lys	Leu	llis		Val	Pro	Val	Glu	
	·		·	325			·		330					335	
Ala	Asp	Leu	Gly	He	Gly	Asp	Leu	Пе	Pro	Val	Asp	Val	Asn	His	Leu
			340					345					350		
Asn	He	Cys	Lys	orq	Lys	Lys	Lys	Asp	Ala	Phe	Leu	Tyr	GIn	Arg	Thr
		355					360					365			
Len	Gln	Phe	He	Arσ	Glu	Ala	Leu	Ala	Lvs	Asn	Len	Glu	Asn		

370 375 380

<210> 3778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3778

Met Phe Gln Arg Leu Asn Lys Met Phe Val Gly Glu Val Ser Ser

1 5 10 15

Ser Asn Glu Pro Glu Phe Asn Glu Lys Glu Asp Asp Glu Trp Ile 20 25 30

Leu Val Asp Phe 11e Asp Thr Cys Thr Gly Phe Ser Ala Glu Gly Glu 35 40 45

Glu Glu Glu Glu Asp Ile Ser Glu Glu Ser Pro Thr Glu His Pro Ser 50 55 60

Val Phe Ser Cys Leu Pro Ala Ser Leu Glu Cys Leu Ala Asp Thr Ser 65 70 75 80

Asp Ser Cys Phe Leu Gln Phe Glu Ser Cys Pro Met Glu Glu Ser Trp

85 90 95

Phe lle Thr Pro Pro Pro Cys Phe Thr Ala Gly Gly Leu Thr Thr lle
100 105 110

Lys Val Glu Thr Ser Pro Met Glu Asn Leu Leu Ile Glu His Pro Ser 115 120 125

Met Ser Val Tyr Ala Val His Asn Ser Cys Pro Gly Leu Ser Glu Ala 130 135 140

Thr Arg Gly Thr Asp Glu Leu His Ser Pro Ser Ser Pro Arg Ala Arg 145 150 155 160

Lys Ser Cys Leu

<210> 3779

<211> 252

<212> PRT

<213≻ Homo sapiens

<400)> 37	779													
Met	Trp	Pro	Asp	Gly	Ser	Ser	Phe	Thr	Gly	Thr	Phe	Tyr	Leu	Ser	His
i				5					10					15	
Arg	Glu	Gly	Tyr	Gly	Thr	Met	Tyr	Met	Lys	Thr	Arg	Leu	Phe	Gln	Thr
			20					25					30		
His	Cys	His	Asn	Asp	He	Val	Asn	Leu	Leu	Leu	Asp	Cys	Gly	Ala	Asp
		35					40					45			
Val	Asn	Lys	Cys	Ser	Asp	Glu	Gly	Leu	Thr	Ala	Leu	Ser	Met	Cys	Phe
	50					55					60				
l.eu	Leu	His	Tyr	Pro	Ala	Gln	Ser	Phe	Lys	Pro	Asn	Val	Λla	Glu	Arg
65					70					75					80
Thr	11e	Pro	Glu	Pro	Gln	Glu	Pro	Pro	Lys	Phe	Pro	Val	Val	Pro	Пе
				85					90					95	
Leu	Ser	Ser	Ser	Phe	Met	Asp	Thr	Asn	Leu	Glu	Ser	Leu	Tyr	Tyr	Glu
			100					105					110		
Val	Asn	Val	Pro	Ser	Gln	Gly	Ser	Tyr	Glu	Leu	Arg	Pro	P.ro	Pro	Ala
		115					120					125			
Pro	Leu	Leu	Leu	Pro	Arg	Val	Ser	Gly	Ser	llis	Glu	Gly	Gly	His	Phe
	130					135					140				
Gln	Asp	Thr	Gly	Gln	Cys	Gly	Gly	Ser	Met	Asp	His	Arg	Ser	Ser	Ser
145					150					155					160
Leu	Lys	G1 y	Asp	Ser	Pro	Leu	Val	Lys	Gly	Ser	Leu	Gly	His	Val	Glu
				165					170					175	
Ser	Gly	Leu	Glu	Asp	Val	Leu	Gly	Asn	Thr	Asp	Arg	G1 y	Ser	Leu	Cys
			180					185					190		
Ser	Ala	Glu	Thr	Lys	Phe	Glu	Ser	Asn	Val	Cys	Val	Cys	Asp	Phe	Ser
		195					200					205			
He	Glu	Leu	Ser	Gln	Ala	Met	Leu	Glu	Arg	Ser	Ala	Gln	Ser	His	Ser
	210					215					220				
Leu	Leu	Lys	Met	Ala	Ser	Pro	Ser	Pro	Cys	Thr	Ser	Ser	Phe	Asp	Lys
225					230					235					240
Gly	Thr	Met	Arg	Arg	Met	Ala	Leu	Ser	Met	He	G1u				
				245					250						

10

30

25

<210> 3780 <211> 125 <212> PRT <213> Homo sapiens <400> 3780 Met Phe Cys Phe Asp Asn Thr Phe Ser Thr 11e Ser Glu Lys Val 11e Phe Phe Glu Leu Ile Leu Asp Asn Met Gly Glu Gln Ala Gln Glu Gln 20 Glu Asp Trp Lys Lys Tyr Ile Thr Gly Thr Asp Ile Leu Asp Met Lys Leu Glu Asp IIe Leu Glu Ser IIe Asn Ser IIe Lys Ser Arg Leu Ser

50 Lys Ser Gly His lle Gln lle Leu Leu Arg Ala Phe Glu Ala Arg Asp 70 75

40

Arg Asn Ile Gln Glu Ser Asn Phe Asp Arg Val Asn Phe Trp Ser Met 90 85

Val Asn Leu Val Val Met Val Val Val Ser Ala Ile Gln Val Tyr Met 100 105 110

Leu Lys Ser Leu Phe Glu Asp Lys Arg Lys Ser Arg Thr 115 120 125

<210> 3781 <211> 179 <212> PRT

<213> Homo sapiens

<400> 3781

Met Ser Cys Ser Pro Asn Arg Ala Gly His Ser Trp Glu Lys Arg Gly 10 Gln Pro Leu Gly Val Val Arg Pro Leu Pro Ala Pro Thr Leu Ser Leu 20 30 25

Val Leu Leu Ser Trp Ser Pro Pro 11e Ala Ser Val Val Pro His Asn

40 Arg Val Trp Leu Cys Ala Gly Pro Gly Ser Gln Glu Ser Leu Pro Ser 55 60 Glu Arg Glu Cys Val Phe Leu Leu Pro Leu Pro Phe Pro Ser Met Ala 65 70 75 80 Leu Leu Pro Ser Pro Arg Thr Ser Pro Ser Leu Gly Asp Ala Phe 90 85 Cys Ser Leu Gln Pro Cys Pro Leu Leu Ser Phe Arg Val Ser Arg Glu 105 110 Pro Leu Arg Ile Ala Thr Cys Arg Gly Ala Val Leu Ser Pro Gln Phe 115 120 125 Leu Ser Leu Trp Tyr Leu Met Leu Leu Thr Thr Ala Ser Phe Leu Thr 135 Ser Gly Phe Leu Thr Pro Phe Pro Ala Cys Ala Leu Ala Ala Ser Pro 145 150 155 160 Pro Cys Thr Gly Phe Arg Gly Cys Ser Ala Pro Gly Ala Ala Gln Ala 165 170 175 Cys Pro Leu

<210> 3782

<211> 1028

<212> PRT

<213> Homo sapiens

<400> 3782

Met Asp Asp Gln Tyr Arg Thr Leu Met Arg Ile Ser Val Ala Asp Pro

1 5 10 15

Met Val Leu Ser Leu Val Val Pro Ser Ala Glu Arg Ser Pro Tyr Phe 20 25 30

Gln Gly Gln Gln Leu Gln Gln Leu Leu Gln Ala Gly Ser Val Glu Leu 35 40 45

Glu Gly 11e 11e Met Ser Leu Glu Ser Val Leu Tyr Gly Val Cys A1a $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60$

His Phe Pro Arg Leu Phe Phe Leu Ser Asp Ser Glu Leu Val Ala Leu

65					70					75					80
Leu	Ala	Лlа	Arg	Leu	Glu	Ser	Cys	Glu	Ala	Gln	Leu	Trp	Val	Arg	Arg
				85					90					95	
Cys	Phe	Pro	His	Val	His	Ala	Val	Ser	Phe	Arg	Ser	Cys	Pro	Thr	Gly
			100					105					110		
Glu	Lys	Asn	Thr	Asp	Asp	Trp	Glu	Ser	Ser	Pro	Λsn	Thr	Gln	Thr	Gln
		115					120					125			
Val	Glu	Ala	Leu	Ala	Val	Leu	G1 y	Ala	Gly	Gly	Glu	Glu	Val	Lys	Leu
	130					135					140				
Gln	Gly	Pro	Leu	Pro	Leu	His	Pro	Asp	Leu	Pro	Lys	Trp	Leu	Ala	Ser
145					150					155					160
Leu	Glu	Lys	Cys	Leu	Arg	Leu	Ala	Leu	Val	llis	Met	Leu	Gln	Gly	Cys
				165					170					175	
Val	Ala	Ala	Arg	Leu	Ala	Arg	Gly	Pro	Ser	Leu	G1y	Glu	Ala	Leu	Lys
			180					185					190		
G1n	Leu	Pro	Lys	Gln	Asn	Lys	Leu	Tyr	Leu	Gln	Leu	Tyr	Val	Gln	His
		195					200					205			
Trp	lle	Лѕр	Leu	Val	Gln	Ala	Phe	Pro	Trp	Gln	Cys	Va]	Leu	Val	Ala
	210					215					220				
Glu	G1u	Val	Val	Trp	Arg	Ala	Glu	Met	Glu	Glu	Ala	Leu	Leu	Glu	Trp
225					230					235					240
Gly	Thr	Leu	Ala	Met	Val	Ser	Met	His	Met	Arg	Lys	Leu	Glu	Val	Leu
				245					250					255	
Val	Asn	Phe	Met	Arg	Ala	Gln	Arg	Ala	Ser	Gln	Gly	Gly	Gln	Ser	Leu
			260					265					270		
Pro	Ser		Arg	Gln	Thr	Ser	Leu	Leu	Ser	Ala	Leu	Leu	Val	Met	Ala
		275					280					285			
Val		His	Arg	Asp	lle		Gln	Leu	Leu	Glu		His	Gln	Val	Ser
	290					295					300				
Asp	Leu	Thr	Asp	Phe	His	Trp	Va]	Arg	Gln		Lys	Tyr	His	Leu	Gly
305					310					315					320
Ser	Pro	His	11e		Pro	Lys	Ser	Pro		Gln	Ser	Leu	Lys		lle
				325	_		_		330					335	
Ala	Ser	Ser		Pro	Ser	Leu	Ser		Ala	Ala	Cys	Trp		Asp	Val
	0.1		340	D 1				345		m.		63	350		,
Lou	GILV	Arce	Sar	Pho	100	Tur	Acn	T 17.32	Cho	1 1/22	1 011	(.1 v	レン	Arc	100

		355					360					365			
Gly	Pro	Leu	Pro	Ser	Leu	Leu	Pro	Glu	Arg	Pro	Ala	Leu	Val	Leu	Leu
	370					375					380				
Leu	Ala	Leu	Glu	Glu	Val	Ala	Cys	Gly	Thr	Val	Leu	Gly	Pro	Asn	Gly
385					390					395					400
Val	Gly	Lys	Arg	Ala	He	Val	Λsn	Ser	Leu	Ala	Gln	Ala	Leu	Gly	Arg
				405					410					415	
Gln	Leu	Val	Met	Leu	Pro	Cys	Ser	Pro	Gln	Ile	Glu	Ala	Gln	Cys	Leu
			420					425					430		
Ser	Asn	Tyr	Leu	Asn	Gly	Ala	Leu	Gln	Gly	Gly	Ala	Trp	Leu	Leu	Leu
		435					440					445			
Glu	Lys	Val	His	GIn	Leu	Pro	Pro	G1 y	Leu	Leu	Ser	Ala	Leu	Gly	Gln
	450					455					460				
Arg	Leu	Gly	Glu	Leu	His	His	Leu	Tyr	Ala	Pro	Leu	Tyr	Gln	Glu	Ala
465					470					475					480
Ser	Arg	Asn	Thr	Ser	Thr	He	Asp	Pro	Thr	Gln	Pro	Gln	Leu	Leu	Gly
				485					490					495	
Ser	Ser	Phe	Phe	Glu	Lys	His	His	Val	Ser	Val	Arg	Leu	Gly	Tyr	Gly
			500					505					510		
Cys	Leu	Leu	Val	Leu	Arg	Ala	Leu	Ser	Ser	Ala	Val	Pro	Ala	Asn	Leu
		515					520					525			
His	Leu	Leu	Leu	Arg	Pro	Val	Ala	Leu	Ala	Leu	Pro	Asp	Leu	Arg	G1n
	530					535					540				
Val	Ala	Glu	Leu	Thr	Leu	Leu	Gly	Ala	Gly	Met	Arg	Asp	Ala	Phe	Gln
545					550					555					560
Met	Ala	Thr	Arg	Leu	Ser	Lys	Phe	Phe	Ser	Leu	Glu	Arg	Glu	Leu	Val
				565					570					575	
Ser	Gly	Pro	Leu	Pro	Cys	Arg	Leu	Pro	Leu	Leu	Lys	Gln	Tle	Leu	Glu
			580					585					590		
Asp	Thr	He	Arg	Thr	Leu	Asn	Val	Thr	Lys	Glu	Glu	Pro	Lys	Cys	Gln
		595					600					605			
Lys	Pro	Arg	Ser	Leu	Ala	Ala	He	Glu	Glu	Ala	Ala	Leu	Leu	His	Ala
	610					615					620				
Leu	Leu	Arg	Ser	Pro	Leu	Phe	Ser	lle	Leu	Asn	Gly	Leu	His	Leu	His
625					630					635					640

As	n Leu	Arg	Gly		Leu	Cys	Ala	Leu		Pro	Ser	Ala	Ser		Val
				645					650					655	
Le	u Ala	Glu	Pro 660	Met	Thr	Tyr	Lys	Leu 665	Met	Lys	Pro	Leu	Val 670	Val	Glu
G1	u Leu	Gln	Gln	Val	Glv	Leu	Asn	Pro	Ser	Pro	Asn	He	Leu	Glv	Ser
٠.		675	0		0.1	.,	680				,	685	.,,,,,	0.,	
10	u Glu		Lou	Sor	Gln	Ala		Sor	Ara	Δla	Sar		116	Lou	Lau
Le		0.111	reu	361	OTH	695	Leu	Sei	AI g	MIa	700	O1 y	116	i,eu	Leu
1 -	690	D	A 1 -	C1	C		1	These	11.	Cua		II. a	C - 11	1	Dlag
	u Gly -	Pro	на	GIY		GIY	Lys	ınr	116		irp	nis	ser	Leu	
70		0.1			710		. 1		0.1	715	æ.		m)	<i>a</i> 1	720
Ly	s Ile	GIn	Asn		Leu	Ala	Ala	Met		Asp	Thr	Ser	Thr		Gly
				725					730					735	
Сy	s Gln	Pro	Val	Glu	lle	Thr	His	Leu	Tyr	Pro	Ser	Gly	Leu	Ser	Pro
			740					745					750		
Gl	n Glu	Phe	Leu	Gly	Trp	Leu	Glu	Gly	Ser	Cys	Trp	His	His	Gly	He
		755					760					765			
Ph	e Pro	Lys	Val	Leu	Arg	Ala	Ala	Gly	Gln	Cys	Asn	Asn	Met	Gly	Gln
	770					775					780				
Ly	s Arg	Gln	Thr	Glu	Glu	Ser	Ile	Gly	11e	Gln	His	Trp	lle	Ile	Cys
78	5				790					795					800
٨s	p Gly	Ala	Ser	Asn	Gly	Ala	Trp	Leu	Asp	Ser	lle	Thr	Cys	Leu	Leu
				805					810					815	
Se	r Glu	Leu	Pro	Gln	Leu	Ser	Leu	Pro	Ser	Gly	Gln	Gln	lle	Ala	Arg
			820					825					830		
Pr	o Pro	Glv	Thr	Phe	Leu	Leu	Met	Glu	Val	Ala	Asp	Thr	Thr	Glv	He
		835					840				•	845		·	
Se	r Pro	Thr	Val	Val	Glv	Cvs	Cvs	Ala	Leu	Val	Trp	Cvs	Glv	Glv	Glu
	850				~-,	855	-,-				860	-,-		,	
G1	n Thr		G1n	Cvs	Tle		Ser	Ala	Leu	Met		Ser	Leu	Pro	Tyr
86		пр	0111	0,3	870	Leu	501	71.10	Lcu	875	nia	001	Lea	110	880
		A 150	Lou	Cln		A 25.07	The	Vol.	Alo		Lou	Acn	Hi.c	Mot	
01	u Tyr	Mg	Leu		1115	MIG	1111	vai	890	ŲΙU	Leu	ASII	1115		MIA
C 1	V. 1		V. 1	885 D	A 7	TI				1	T)	C .	61	895	W 1
61	u Val	Leu		rro	лта	ınr	Leu		rne	Leu	ını	Cys		GIŸ	val
	6	,	900	0.1			0.3	905	6.1		v - 3	0	910	0.1	., .
Se	r Ser		Leu	GIn	Val	His		GIn	Gln	Ala	Val		Ala	Gly	Val
		915					920					925			

Ala Glu Val Thr Ser Met Ala Arg Ile Leu His Ser Leu Leu Asp Leu 935 940 His Leu Arg Leu Lys Glu Glu Lys Ala Pro Gly Pro Glu Asp Leu Ser 950 955 960 Tyr Ser Asp Pro Val Ala Gln Ser Phe Arg Ser Ser Lys Ser Ser Phe 965 970 975 Leu Asn Arg Ser Gln Val Asp Ser Asp Asp Val Pro Asp Lys Cys Arg 985 Glu His Leu Leu Ala Val Ser Ser Phe Leu Phe Ala Leu Ile Trp Gly 995 1000 1005 Phe Gly Ala His Leu Pro Ser Arg Tyr Leu Pro Gly Trp Gly Met Gly 1015 1020 Asp Ala Glu Gly

<210> 3783

1025

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3783

Met Asn His Ala Ser Cys Asn Thr Phe Ser Gln Thr Glu Thr Pro Lys 5 l Tyr Ala Cys Asn Val Leu Thr Lys Lys Glu Ala lle Val Gln Leu Ala 25 20 30 Lys His Leu Asn Leu Phe Arg Val Arg Glu Glu Ser Ser Asn Cys Leu 40 45 Asp Val Thr Trp Arg Glu Gly Cys Gly Lys His His Ser Leu Gln Ala 50 55 Pro Phe Ser Leu Cys Glu Ala Phe Ser Lys Met Gln Pro Ala Leu Thr 70 His Gln Ala Trp Phe Cys Ser Pro Cys His Arg Asp Pro Ala Gly Ser 85 90 95

Leu Ala Met Arg Arg Cys Asn Cys Val Ser Cys Gly Leu Leu Gln Lys

100 105 110
Asp Trp Pro Pro Pro Gln Thr
115

<210> 3784

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3784

Met Leu Leu His Gly Leu Ser Gln Ala Arg Pro Ser Val Gly Leu Glu
1 5 10 15

Gln Leu Ser Cys Gln Thr Leu Thr Arg Leu Gly Lys Gly Leu Val Thr
20 25 30

Gly Gln Phe Pro Ala Cys Arg Ala Pro Asn Cys Cys Ser Arg Gln Val 35 40 45

Pro Glu Arg Gln Phe Gln 11e Asn Ala Cys Pro Ser Gln Gly Thr Ala 50 55 60

Glu Arg Glu Arg Pro Glu Thr Ala Thr Thr Pro Phe Leu His Pro Leu 65 70 75 80

Cys Pro Pro Gly Ile Gln Leu Asn His Leu Leu Leu His Ile Leu Gly 85 90 95

Lys Lys Asp Asp Ala Val Leu Gly Pro Pro Ala Ile Asn Asp Arg Gl
n 100 105 110

Leu Phe Asp Leu Ala Gly Ser Gln Val Asp Val Phe Ser Gly Ala Gln
115 120 125

Leu Phe Leu Gln Pro Thr Ser Gln Val Asp Ser 130 135

<210> 3785

<211> 1224

<212> PRT

<213> Homo sapiens

<400)> 3	785													
Met	Thr	Cys	Thr	Lys	Asn	Pro	Ġln	Asn	Leu	Asn	Gln	He	His	Glu	Glu
1				5					10					15	
Thr	Ala	Lys	Lys	Ala	Gln	Asn	Leu	Val	Leu	Pro	Asn	۸rg	Lys	Ser	Pro
			20					25					30		
Ser	Pro	Val	Ala	Pro	His	Pro	Ser	Thr	Phe	Va]	Ala	Thr	Pro	Ala	Ser
		35					40					45			
His	Asn	Leu	Val	Asn	Gln	Thr	Asn	Gly	Thr	Thr	Lys	Glu	Ser	Ala	Leu
	50					55					60			•	
Leu	Leu	His	Val	Leu	Leu	Met	Val	Pro	Asp	Gly	Lys	Asp	Phe	He	Ser
65					70					75					80
G1 y	Glu	Ser	Glu	Lys	Gln	Ser	Pro	Cys	Asn	Va]	Tyr	Leu	Asn	Cys	Lys
				85					90					95	
Leu	Phe	Ser		Glu	G]u	Va]	Thr		Ser	Val	lle	Ala	Trp	G1y	Thr
			100					105					110		
Thr	Gln		Val	Phe	Asn	Phe		Gln	Val	lle	Pro		Ser	Leu	Ser
_		115					120					125			
Ser		Tyr	Leu	Glu	Arg		Lys	Asn	Asn	Val		Va]	Ile	GIu	Thr
Æ.	130					135 D	0.1	61		,	140	,	<i>a</i> 1		17 7
	Asn	Lys	Val	Arg		Pro	Gly	GIn	Asp		Leu	Leu	Gly	Leu	
145	1	D	1	112	150	101	т	Mad	C	155 Di-	1	۸	A 7	1	160
Lys	Leu	rro	Leu	165	GIN	rne	iyr	Met	5er 170	rne	Lys	Asp	Ala		116
Sor	Ara	Lou	Lou		Acn	Ala	Cl _p	Tyr		Vol	Va 1	Ala	Vol	175	Sor
361	Mg	Leu	180	Leu	лър	мта	OIH	185	110	vai	vai	ліа	Val 190	nsp	261
Tyr	Met	Pro		He	Asn	Val	Phe		Glv	His	Gln	Asn	Gly	Ser	Lei
.,.	Met	195		110	тор	, u i			01,		OIII	205			Dec
Arg	Val		Leu	Ala	Met	Glv					He		Ala	l.eu	Glr
6	210					215					220				• • •
Arg		Lys	Asn	Glu	Glu		Thr	Leu	Pro	Pro		Ser	Pro	Arg	Pro
225					230	·				235					240
Ala	His	Phe	Leu	Asp	Gln	Pro	Thr	Ala	Ala	Ser	Val	Ala	Met	Ala	Glu
				245					250					255	
Asp	Arg	G1 y	Asn	Gly	Leu	Met	Glu	His	Cys	Phe	Glu	He	His	He	Glu
			260					265					270		

Met	Val	Lys	Gly	Leu	Ala	Pro	Leu	Gln	Ala	Thr	Val	Trp	Gly	Glu	Ala
		275					280					285			
Asp	Cys	Tyr	Val	Gln	Tyr	Tyr	Phe	Pro	Val	GIn	His	Ser	Gln	Ser	Ser
	290					295					300				
Val	Leu	Lys	Gly	Pro	Glu	Phe	Leu	Glu	Asn	Gly	He	Thr	Leu	Lys	Pro
305					310					315					320
Phe	Arg	Thr	Ala	Thr	Thr	Leu	Cys	Va]	Pro	Asp	Pro	lle	Phe	Asn	Ser
				325					330					335	
Glu	His	His	His	Ser	Leu	Leu	Leu	Pro	Ala	Glu	Val	Pro	Val	Gln	Arg
			340					345					350		
Leu	Leu	Leu	Ser	Ala	Phe	Ser	Ala	Gln	Gly	Leu	Val	Pro	Gly	Gly	Gly
		355					360					365			
Val	Gln	Phe	Glu	He	Trp	Cys	Arg	Tyr	Tyr	Tyr	Pro	Asn	Val	Arg	Asp
	370					375					380				
Gln	Lys	Val	Ala	Lys	Gly	Thr	Leu	Pro	Leu	Ser	Arg	He	Cys	Ala	Me t
385					390					395					400
Val	Thr	Thr	Gln	His	Arg	Glu	Asp	Val	Gly	lle	Gln	Thr	Phe	Asn	Leu
				405					410					415	
Pro	Leu	Thr	Pro	Arg	lle	G1 u	Asn	Arg	Lys	Glu	Leu	Arg	Asn	Gln	Ser
			420					425					430		
Ser	G1y		Leu	Asp	Va]	G] y	Leu	Arg	Tyr	Arg	Arg	Ser	Pro	Arg	Thr
		435					440					445			
Ala	G]u	Gly	Val	Leu	Ala		Arg	Thr	Val	Ser		Ser	Val	Gln	He
	450					455					460				
He	Arg	Ala	Cys	Gly		GIn	Ala	Ala	Ala		Ala	Leu	Ala	Glu	
465					470					475					480
Glu	Pro	Ala	Leu		Phe	Ser	Ala	Thr		Gly	Val	Asn	Ala		Val
				485					490					495	
Thr	Thr	His		Ser	Phe	Leu	Pro	Gln	Gly	Glu	Gln	Arg		Thr	His
			500	_		_		505					510		
Pro	Val		Cys	Ser	Phe			Glu	Phe	Ser	His		Val	Glu	Phe
		515					520		_			525	_		
Thr		Asn	Leu	Val	Thr		His	Cys	Ser	Gly		Ala	Cys	Phe	Leu
. 1	530				D)	535		,		131	540	., .	T.		0.3
Ala	G1u	Leu	Leu	Glu	Phe	Ala	GLu	Val	He	Phe	Ala	Val	lyr	His	
h 11 -					にこひ					4- 1- 1-					CCO

Ası	1 Thr	Lys	Ser	Ala	Ser	Asp	He	He	Ser	He	Glu	Ser	Cys	Lys	Glu
				565					570					575	
Ty	Leu	Leu	Gly	Val	Va!	Lys	Val	Pro	Thr	Lys	Glu	Leu	Leu	Пe	Lys
			580					585					590		
Arg	g Ser	Gly	He	Thr	Gly	Trp	Tyr	Pro	He	Пе	Leu	Pro	Glu	Asp	Gly
		595					600					605			
Gl	Leu	Pro	His	Gly	Leu	Glu	Leu	Met	Gln	Lys	He	Val	Gly	Gly	Leu
	610					615					620				
Glu	ı Leu	Ser	lle	Ser	Phe	Thr	His	Arg	Gly	Asp	Arg	Glu	Arg	Val	Leu
62	5				630					635					640
Gl	ı Ala	Ala	Glu	His	Leu	Gly	Trp	Ser	Phe	Glu	Asn	Ser	Leu	Lys	Asp
				645					650					655	
Pho	e Val	Arg	Met	Asp	Glu	Gly	Glu	Pro	Ala	Thr	Val	Thr	Пe	Ser	Thr
			660					665					670		
Pre	Arg	Leu	Trp	Leu	Pro	Ile	His	Cys	Val	Leu	Leu	Ala	Gly	His	Asn
		675					680					685			
Hi	s Ile	His	Lys	Asn	Thr	Tyr	Cys	Tyr	Leu	Arg	Tyr	Lys	Phe	Tyr	Asp
	690					695					700				
Hi:	s Glu	Ala	Phe	Trp	Thr	Pro	Leu	Lys	Lys	Pro	Lys	G]u	Ser	Val	Asn
70	5				710					715					720
Ly	s Lys	Gln	lle	Met	Val	Thr	Phe	Lys	Ala	Ser	Lys	Arg	Ala	Glu	Val
				725					730					735	
Th:	r Arg	Gly	Pro	Ser	Leu	Leu	Trp	Tyr	Phe	Arg	G]u	Glu	Arg	Leu	Glu
			740					745					750		
110	e Gln	Val	Trp	Arg	Ala	Tyr	Gly	Asn	Asp	Ser	Val	Glu	Arg	Pro	His
		755					760					765			
Gli	n Thr	Asp	Ser	Trp	lle	Gly	Ser	Ala	Tyr	Va1	Asp	Leu	Ala	Arg	Leu
	770					775					780				
Gl	y Glu	Arg	Ser	Ala	Arg	Thr	Leu	Thr	Val	Ser	Gly	Val	Tyr	Pro	Leu
78	5				790					795					800
Ph	e Gly	Arg	Asn	Ala	Ser	Asn	Leu	Ser	Gly	Ala	Ala	Leu	Arg	Val	His
				805					810					815	
Va	lVal	Leu	Ser	Ser	Leu	Ser	Ser	His	Leu	Glu	Pro	Thr	llis	Glu	Leu
			820					825					830		
Ası	s Ser	Met	Asp	Cys	Ser	Ser	His	Ser	Glu	Ser	Glu	Gln	Leu	Pro	Arg
		835					840					845			

Arg	Asn	Asp	Glu	Val	Gln	Leu	Ser	Pro	Pro	Glu	Val	lle	Ser	Cys	His
	850					855					860				
Gln	Lys	Ser	Pro	Ala	Ser	Thr	Gln	Val	Pro	Cys	Ser	Ser	Thr	Thr	Ala
865					870					875					880
Glu	Val	Arg	Leu	Thr	Arg	Glu	Gly	Pro	Ala	Asp	Leu	Asp	Gly	Thr	Phe
				885					890					895	
Ala	Val	Ser	He	Leu	Val	Glu	Arg	Ala	Met	His	Leu	Ser	Leu	Lys	Gly
			900					905					910		
Ser	Pro	Leu	Thr	Glu	Arg	Lys	Val	Ser	lle	Pro	Ser	Cys	Cys	Val	Ser
		915					920					925			
Phe	Ala	Thr	Ala	Asp	Glu	Ser	Ser	Pro	Val	Tyr	Thr	Gln	Val	Val	Glu
	930					935					940				
Asn	Thr	Asp	Ser	Pro	He	Trp	Asn	Phe	Gln	Gln	Gln	Ser	Arg	Leu	Ser
945					950					955					960
Lys	Glu	Leu	Leu	Leu	Asp	Pro	Gln	Gln	Thr	Leu	Val	Phe	Lys	Val	Trp
				965					970					975	
His	Lys	Gly	Asp	Glu	Glu	Arg	Val	Ile	Gly	Phe	Ala	Ser	Val	Asp	Leu
			980					985					990		
Ser	Pro	Leu	Leu	Ser	Gly	Phe	Gln	Phe	Val	Cys	Gly	Trp	Tyr	Asn	11e
		995					1000					1005			
Thr	Asp	Phe	Ser	Gly	Glu	Cys	Gln	Gly	Gln	lle	Lys	Va]	Ala	Val	Ser
	1010					1015					1020				
Pro	Leu	Glu	Ser	Leu	He	His	Phe	Lys	Glu	Glu	Arg	Gln	Glu	Arg	Arg
1025	5				1030					1035					1040
Gly	Val	Glu	Thr	Ser	Lys	Ser	Leu	He	Pro	lle	Tyr	Ser	Pro	Phe	Ser
			,	1045					1050					1055	
Phe	Pro	Лlа	Ser	Asp	Thr	Tyr	Ala	Ala	Phe	Ser	Ser	llis	Met	Ala	Arg
			1060					1065					1070		
Gln	Thr	Leu	Asp	Gln	Leu	Ala	His	Ala	Ser	Ser	Lys	G]u	Leu	Asp	Phe
		1075					1080					1085			
Ser	Ser	Pro	Gly	Arg	Ser	Asp	Thr	Thr	Arg	Ser	Gln	Ala	Ser	Arg	His
	1090					1095					1100				
Glu	Glu	His	Val	Gln	Asn	11e	Arg	Arg	Phe	His	Głu	Ser	Leu	llis	Leu
110	ō				1110					1115					1120
Gln	Gly	Glu	Ala	Pro	Leu	Pro	Cys	Asp	Asp	Lys	Leu	Thr	Thr	Ser	Pro
				1125					1130					1135	

Leu Ser Ser Gln Thr Ser Ile Leu Thr Ser Leu Arg Lys Asn Leu Ser 1145 Glu Leu Asp Gln lle Gln Arg Tyr Phe Arg Gln Lys Leu Thr Lys Pro 1160 1165 Phe Leu Pro Leu Ser Pro Gln Thr Gln Thr Ala 11e Ser Gln His Gln 1175 1180 Glu Ser Cys Arg Asp His Leu Gly Pro Gly Ala Ser Ser Leu Asp Pro 1190 1195 Gly Ser Gln Cys Ile Leu Glu Lys Ser Ser Asn Leu Val Leu Gln Val 1205 1210 1215 Ser Ser Leu Ile Thr Gly Ser Tyr

<210> 3786

<211> 186

<212> PRT

<213> Homo sapiens

1220

⟨400⟩ 3786

 Met
 Thr
 Glu
 Met
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 Arg
 Cys
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 Trp
 Gln
 Val
 Pro
 Pro
 His
 Gly
 Leu

 Ala
 Gln
 Pro
 Pro
 Val
 Cys
 Ser
 Gln
 Gln
 Gln
 Thr
 Thr
 Arg
 Trp
 Gly

 Tyr
 Ser
 11e
 Leu
 His
 Leu
 Leu
 Leu
 Cys
 Arg
 Ala
 Pro
 Gln
 Gly
 Thr
 Asn
 Asn
 Ser
 Gln
 Val
 Trp
 Pro
 Phe
 Pro
 Thr
 Leu
 Ser
 Pro
 Gln
 Leu
 Val

 Ser
 Ser
 Gln
 Val
 Trp
 Pro
 Phe
 Pro
 Thr
 Leu
 Ser
 Pro
 Gln
 Leu
 Val

 Ser
 Ser
 Ala
 Tyr
 Lys
 Glu
 Thr
 Val
 Thr
 Ser
 Ser
 Ile
 Phe
 Trp
 Lys
 Gly
 </

Ser Glu Thr Gly Leu Leu Ser Phe Arg Val Ala Thr Arg Phe Ser 11e

Leu Gln Thr Leu Gly Thr Thr Ser His Leu Pro Leu Thr Gly Pro Gly
100 105 110

Leu Ser Lys Val Ser Gly Ala Gln Asp Val Thr Arg Ala Thr Ser Thr 115 120 125
 Pro
 Ser
 Arg
 Thr
 Phe
 Asp
 Val
 Ser
 Val
 Asp
 Leu
 Asp
 Leu
 Ala
 Phe
 Gly
 Val
 Gln

 11e
 11e
 Gln
 Ala
 Leu
 Gln
 Asp
 Leu
 Pro
 Gln
 Asp
 Arg
 Gly
 Asp
 Val
 Cys

 145
 ...
 ...
 150
 ...
 ...
 155
 ...
 ...
 160

 Leu
 Leu
 Gln
 Gly
 Thr
 Trp
 Phe
 Lys
 Leu
 Glu
 Arg
 Lys
 Val
 Arg
 Gln
 Gln

 Gly
 Leu
 Ser
 Cys
 Pro
 Arg
 Pro
 Asn
 Ala

 Heu
 Ser
 Ser
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 Pro
 Arg
 Pro
 Asn
 Ala

<210> 3787

<211> 773 →

<212> PRT

145

<213> Homo sapiens

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Gly Gly Gln Lys Pro Asp Thr Ser Gly Asn Tyr Pro Thr Leu Pro Arg

155

160

150

Phe	Pro	Arg	Met		Pro	Thr	Leu	Cys		Pro	Gly	Lys	Gln		Thr
				165					170	_				175	
Asp	Glu	Gln	Phe	Gln	Cys	Thr	Gln		Ala	Lys	Asp	Ser	Leu	Glu	Thr
			180					185					190		
Ser	Arg	He	Gln	Asn	Thr	Ser	Ser	Gln	Gly	Arg	Pro	Arg	Glu	Ser	Thr
		195					200					205			
Ala	Gln	Ala	Lys	Ala	Thr	Gln	Phe	Λsn	Ser	Ala	Leu	Phe	Thr	Leu	Ser
	210					215					220				
Ser	His	Arg	Gln	Gly	Pro	Ser	Ala	Ser	Pro	Ser	Cys	His	Trp	Asp	Ser
225					230					235					240
Thr	Arg	Met	Ser	Val	Glu	Pro	Val	Ser	Ser	Glu	He	Tyr	Asn	Ala	Glu
				245					250					255	
Ser	Arg	Asn	Lys	Asp	Asp	Gly	Lys	Val	His	Leu	Lys	Trp	Lys	Met	Glu
			260					265					270		
Val	Lys	Glu	Met	Ala	Lys	Lys	Ala	Ala	Thr	Gly	Gln	Leu	Thr	Val	Pro
		275					280					285			
Pro	Trp	His	Pro	Gln	Ser	Ser	Leu	Thr	Leu	Glu	Ser	Glu	Ala	Glu	Asn
	290					295					300				
Glu	Pro	Asp	Ala	Leu	Leu	Gln	Pro	Pro	He	Arg	Ser	Pro	Glu	Asn	Thr
305					310					315					320
Asp	Trp	Gln	Arg	Va]	lle	Glu	Tyr	His	Arg	Glu	Asn	Asp	Glu	Pro	Arg
				325					330					335	
Gly	Asn	Gly	Lys	Phe	Asp	Lys	Thr	Gly	Asn	Asn	Asp	Cys	Asp	Ser	Asp
			340					345					350		
Gln	His	Gly	Arg	Gln	Pro	Arg	Leu	Gly	Ser	Phe	Thr	Ser	lle	Arg	llis
		355					360					365			
Pro	Ser	Pro	Arg	Gln	Lys	Glu	Gln	Pro	Glu	His	Ser	Glu	Ala	Phe	G1n
	370					375					380				
Ala	Ser	Ser	Asp	Thr	Leu	Va1	Ala	Val	Glu	Lys	Ser	Tyr	Ser	His	G1n
385					390					395					400
Ser	Met	Ġln	Ser	Thr	Cys	Ser	Pro	Glu	Ser	Ser	Glu	Asp	He	Thr	Asp
				405					410					415	
Glu	Phe	Leu	Thr	Pro	Asp	Asp	Glu	Tyr	Phe	Tyr	Ser	Ser	Thr	Ala	G1n
			420		-	•		425		-			430		
Glu	Asn	Leu		Leu	Glu	Thr	Ser		Pro	He	Glu	Glu		Phe	G]u
		435					440					445			
								•							

Gly	He	Gln	Gly	Ala	Phe	Ala	Gln	Pro	Gln	Val	Ser	Gly	Glu	Glu	Lys
	450					455					460				
Phe	Gln	Met	Arg	Lys	He	Leu	Gly	Lys	Asn	Ala	Glu	He	Leu	Pro	Arg
465					470					475					480
Ser	Gln	Phe	Gln	Pro	Val	Arg	Ser	Thr	Glu	Asp	Glu	G1n	Glu	Glu	Thr
				485					490		•			495	
Ser	Lys	Glu	Ser	Pro	Lys	Glu	Leu	Lys	Glu	Lys	Asp	lle	Ser	Leu	Thr
			500					505					510		
Asp	He	Gln	Asp	Leu	Ser	Ser	lle	Ser	Tyr	Glu	Pro	Asp	Ser	Ser	Phe
		515					520					525			
Lys	Glu	Ala	Ser	Cys	Lys	Thr	Pro	Lys	He	Asn	His	Ala	Pro	Thr	Ser
	530					535					540				
Val	Ser	Thr	Pro	Leu	Ser	Pro	Gly	Ser	Val	Ser	Ser	Ala	Ala	Ser	Gln
545					550					555					560
Tyr	Lys	Asp	Cys	Leu	Glu	Ser	lle	Thr	Phe	Gln	Val	Lys	Thr	Glu	Phe
				565					570					575	
Аlа	Ser	Cys	Trp	Asn	Ser	Gln	Glu	Phe	lle	Gln	Thr	Leu	Ser	Asp	Asp
			580					585					590		
Phe	He	Ser	Val	Arg	Glu	Arg	Ala	Lys	Lys	Leu	Лsp	Ser	Leu	Leu	Thr
		595					600					605			
Ser	Ser	Glu	Thr	Pro	Pro	Ser	Arg	Leu	Thr	Gly	Leu	Lys	Arg	Leu	Ser
	610					615					620				
Ser	Phe	He	Gly	Ala	Gly	Ser	Pro	Ser	Leu	Val	Lys	Ala	Cys	Asp	Ser
625					630					635					640
Ser	Pro	Pro	His	Ala	Thr	Gln	Arg	Arg	Ser	Leu	Pro	Lys	Val	Glu	Ala
				645					650					655	
Phe	Ser	Gln	His	His	lle	Asp	Glu	Leu	Pro	Pro	Pro	Ser	Gln	Glu	Leu
			660					665					670		
Leu	Asp	Asp	lle	Glu	Leu	Leu	Lys	Gln	Gln	Gln	Gly	Ser	Ser	Thr	Val
		675					680					685			
Leu	llis	Glu	Asn	Thr	Ala	Ser	Asp	Gly	Gly	Gly	Thr	Ala	Asn	Asp	Gln
	690					695					700				
Arg	His	Leu	Glu	Glu	Gln	Glu	Thr	Asp	Ser	Lys	Lys	Glu	Asp	Ser	Ser
705					710					715					720
Met	Leu	Leu	Ser	Lys	Glu	Thr	Glu	Asp	Leu	Gly	Glu	Asp	Thr		Arg
				725					730					735	

Ala His Ser Thr Leu Asp Glu Asp Leu Glu Arg Trp Leu Gln Pro Pro
740 745 750

Glu Glu Ser Val Glu Leu Gln Asp Leu Pro Lys Gly Ser Glu Arg Glu
755 760 760 765

Thr Asn Ile Lys Asp
770

<210> 3788

<211> 969

<212> PRT

<213> Homo sapiens

<400> 3788

 Met
 Val
 Lys
 Leu
 Val
 Leu
 Leu
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 Ser
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 Val
 Leu
 Leu
 Lys
 Val
 Thr
 Val

 1
 5
 10
 15
 15

 Pro
 Lys
 Leu
 Ser
 Asn
 Tyr
 Leu
 Leu
 Gln
 Leu
 Asp
 Phe
 Met
 Pro
 11e
 His

 20
 25
 30

 Arg
 Gly
 Ile
 Leu
 Ala
 Asp
 Pro
 Glu
 Leu
 Leu

 40
 45

 Leu
 Ser
 Asn
 Pro
 Asn
 Thr

50 55 60 Gly Glu Val Leu Tyr Glu Leu Pro Thr Asn Thr Gln Trp Cys Phe Asp

65 70 75 80

11e Gln Trp Cys Pro Arg Asn Pro Ala Val Leu Ser Ala Ala Ser Phe 85 90 95

Asp Gly Arg 11e Ser Val Tyr Ser 11e Met Gly Gly Ser Thr Asp Gly
100 105 110

Leu Arg Gln Lys Gln Val Asp Lys Leu Ser Ser Ser Phe Gly Asn Leu 115 120 125

Asp Pro Phe Gly Thr Gly Gln Pro Leu Pro Pro Leu Gln 11e Pro Gln 130 135 140

Gln Thr Ala Gln His Ser IIe Val Leu Pro Leu Lys Lys Pro Pro Lys 145 150 155 160

Trp 11e Arg Arg Pro Val Gly Ala Ser Phe Ser Phe Gly Gly Lys Leu 165 170 175

Val	Thr	Phe	Glu	Asn	Val	Arg	Met	Pro	Ser	His	Gln	Gly	Ala	Glu	Gln
			180					185					190		
G] n	Gln	Gln	Gln	His	His	Val	Phe	Пе	Ser	Gln	Va]	Val	Thr	Glu	Lys
		195					200					205			
Glu	Phe	Leu	Ser	Arg	Ser	Asp	Gln	Leu	Gln	Gln	Ala	Val	Gln	Ser	Gln
	210					215					220				
Gly	Phe	He	Asn	Tyr	Cys	Gln	Lys	Lys	Пе	Asp	Ala	Ser	G1n	Thr	Glu
225					230					235					240
Phe	Glu	Lys	Asn	Val	Trp	Ser	Phe	Leu	Lys	Val	Asn	Phe	Glu	Asp	Asp
				245					250					255	•
Ser	Arg	Gly	Lys	Tyr	Leu	Glu	Leu		G1 y	Tyr	Arg	Lys		Asp	Leu
			260					265					270		
G1 y	Lys		His	He	Lys	G]u		Lys	Glu	G]u	Ser		Phe	Leu	Pro
		275					280					285			
Ser		Gly	Gly	Thr	Phe		lle	Ser	Val	Ser		Asp	He	Asp	Gly
	290					295					300				
	He	Thr	GIn	Ala		Leu	Thr	Gly	Asn		Glu	Ser	Ala	Val	
305					310			. 1		315	7.1	7.1			320
Leu	Cys	Leu	HIS		Asn	Arg	Met	Ala	Asp	Ala	11e	He	Leu		11e
41	C1	C1	C1	325	1	L	A 1 -	Λ	330	C1-	1	1	т	335	۸1
АТа	01 À	ыу		Giu	Leu	Leu	на		Thr	GIN	Lys	Lys		rne	мта
Lua	Can	Cln	340	Luc	По	The	Ana	345	Tla	The	A16	Vol	350	Mot	Lva
LyS	261	355	361	Lys	116	1111	360	Leu	He	1111	МІА	365	val	met	Lys
Aen	Trn		Glu	116	Val	Glu		Cve	Asp	lau	lve		Trn	Ara	Glu
non	370	Lys	Olu	110	, 41	375	501	Cys	пэр	LCu	380	поп	ijρ	711 G	Old
Ala		Ala	Ala	Val	Leu		Tvr	Ala	Lys	Pro		Glu	Phe	Ser	Ala
385					390		- , -		, -	395	****				400
	Cvs	Asp	Leu	Leu		Thr	Arg	Leu	Glu		Glu	G1 y	Asp	Ser	
	•	•		405	•		. 0		410			•	•	415	
Leu	Gln	Thr	Gln		Cys	Leu	Cys	Tyr	He	Cys	Ala	G1 y	Asn		Glu
			420		·		•	425					430		
Lys	Leu	Val	Ala	Cys	Trp	Thr	Lys	Ala	Gln	Asp	Gly	Ser	His	Pro	Leu
		435					440					445			
Ser	Leu	Gln	Asp	Leu	He	Glu	Lys	Val	Val	He	Leu	Arg	Lys	Ala	Val
	450					455					460				

Gln	Leu	Thr	Gln	Ala	Met	Asp	Thr	Ser	Thr	Val	Gly	Val	Leu	Leu	Ala
465					470					475					480
Ala	Lys	Met	Ser	Gln	Tyr	Ala	Asn	Leu	Leu	Ala	Ala	G1n	Gly	Se.r	Пe
				485					490					495	
Ala	Ala	Ala	Leu	Ala	Phe	Leu	Pro	Asp	Asn	Thr	Asn	Gln	Pro	Asn	lle
			500					505					510		
Met	Gln	Leu	Arg	Asp	Arg	Leu	Cys	Arg	Ala	Gln	Gly	Glu	Pro	Val	Ala
		515					520					525			
Gly	His	Glu	Ser	Pro	Lys	He	Pro	Tyr	Glu	Lys	Gln	Gln	Leu	Pro	Lys
	530					535					540				
Gly	Arg	Pro	Gly	Pro	Val	Ala	Gly	His	His	Gln	Met	Pro	Arg	Val	Gln
545					550					555					560
Thr	Gln	Gln	Tyr	Tyr	Pro	His	Val	Arg	He	Ala	Pro	Thr	Val	Thr	Thr
				565					570					575	
Trp	Ser	Asn	Lys	Thr	Pro	Thr	Ala	Leu	Pro	Ser	His	Pro	Pro	Ala	Ala
			580					585					590		
Ser	Pro	Ser	Asp	Thr	Gln	Gly	Glu	Asn	Pro	Pro	Pro	Pro	Gly	Phe	He
		595					600					605			
Met	llis	Gly	Asn	Val	Asn	Pro	Asn	Ala	Ala	Gly	Gln	Leu	Pro	Thr	Ser
	610					615					620				
Pro	Gly	His	Met	His	Thr	Gln	Val	Pro	Pro	Tyr	Pro	Gln	Pro	Gln	Pro
625					630					635					640
Tyr	Gln	Pro	Ala	Gln	Pro	Tyr	Pro	Phe	Gly	Thr	Gly	Gly	Ser	Ala	Met
				645					650					655	
Tyr	Arg	Pro	Gln	Gln	Pro	Val	Ala	Pro	Pro	Thr	Ser	Asn	Ala	Tyr	Pro
			660					665					670		
Asn	Thr	Pro	Tyr	He	Ser	Ser	Ala	Ser	Ser	Tyr	Thr	Gly	Gln	Ser	Gln
		675					680					685			
Leu	Tyr	Ala	Ala	Gln	His	Gln	Ala	Ser	Ser	Pro	Thr	Ser	Ser	Pro	Ala
	690					695					700				
Thr	Ser	Phe	Pro	Pro	Pro	Pro	Ser	Ser	Gly	Ala	Ser	Phe	Gln	His	Gly
705					710					715					720
Gly	Pro	Gly	Ala	Pro	Pro	Ser	Ser	Ser	Ala	Tyr	Ala	Leu	Pro	Pro	Gly
				725					730					735	
Thr	Thr	Gly	Pro	Gln	Asn	Gly	Trp	Asn	Asp	Pro	Pro	Λla	Leu	Asn	Arg
			740					745					750		

Val	Pro	Lys	Lys	Lys	Lys	Met	Pro	Glu	Asn	Phe	Met	Pro	Pro	Val	Pro
		755					760					765			
lle	Thr	Ser	Pro	11e	Met	Asn	Pro	Leu	Gly	Asp	Pro	Gln	Ser	Gln	Met
	770					775					780				
Leu	Gln	Gln	Gln	Pro	Ser	Ala	Pro	Val	Pro	Leu	Ser	Ser	Gln	Ser	Ser
785					790					795					800
Phe	Pro	Gln	Pro	His	Leu	Pro	Gly	Gly	Gln	Pro	Phe	His	Gly	Va]	Gln
				805					810					815	
Gln	Pro	Leu	Gly	Gln	Thr	Gly	Met	Pro	Pro	Ser	Phe	Ser	Lys	Pro	Asn
			820					825					830		
lle	Glu	Gly	Ala	Pro	Gly	Ala	Pro	He	Gly	Asn	Thr	Phe	Gln	His	Val
		835					840					845			
Gln	Ser	Leu	Pro	Thr	Lys	Lys	11e	Thr	Lys	Lys	Pro	lle	Pro	Asp	Glu
	850					855					860				
His	Leu	He	Leu	Lys	Thr	Thr	Phe	Glu	Asp	Leu	lle	Gln	Arg	Cys	Leu
865					870					875					880
Ser	Ser	Ala	Thr	Asp	Pro	Gln	Thr	Lys	Arg	Lys	Leu	Asp	Asp	Ala	Ser
				885					890					895	
Lys	Arg	Leu	Glu	Phe	Leu	Tyr	Asp	Lys	Leu	Arg	Glu	Gln	Thr	Leu	Ser
			900					905					910		
Pro	Thr	He	Thr	Ser	Gly	Leu	His	Λsn	Пе	Ala	Arg	Ser	lle	G]u	Thr
		915					920					925			
Arg	Asn	Tyr	Ser	Glu	Gly	Leu	Thr	Met	His	Thr	His	He	Val	Ser	Thr
	930					935					940				
Ser	Asn	Phe	Ser	Glu	Thr	Ser	Ala	Phe	Met	Pro	Val	Leu	Lys	Val	Val
945					950					955					960
Leu	Thr	Gln	Ala	Asn	Lys	Leu	Gly	Val							
				965											

<210> 3789

<211> 1488

<212> PRT

<213> Homo sapiens

<400> 3789

Met	Val	Lys	Gly	Ser	Val	Glu	Asn	Tyr	Arg	Leu	lle	His	Asn	Trp	Val
l				5					10					15	
Met	Ala	Gln	His	Met	Gln	Ser	His	Ala	Pro	Tyr	Lys	Trp	Asp	Tyr	Trp
			20					25					30		
Pro	His	Glu	Asp	Val	Arg	Ala	Glu	Cys	Arg	Phe	Val	Gly	Leu	Thr	Asn
		35					40					45			
Leu	Gly	Ala	Thr	Cys	Tyr	Leu	Ala	Ser	Thr	He	Gln	Gln	Leu	Tyr	Met
	50					55		,			60				
He	Pro	Glu	Ala	Arg	Gln	Ala	Val	Phe	Thr	Ala	Lys	Tyr	Ser	Glu	Asp
65					70					75					80
Met	Lys	His	Lys	Thr	Thr	Leu	Leu	Glu	Leu	Gln	·Lys	Met	Phe	Thr	Tyr
				85					90					95	
Leu	Met	Glu	Ser	Glu	Cys	Lys	Ala	Tyr	Asn	Pro	Arg	Pro	Phe	Cys	Lys
			100					105					110		
Thr	Tyr	Thr	Met	Asp	Lys	Gln	Pro	Leu	Asn	Thr	Gly	Glu	Gln	Lys	Asp
		115					120					125			
Met		Glu	Phe	Phe	Thr	Asp	Leu	He	Thr	Lys	lle	Glu	Glu	Met	Ser
	130					135					140				
Pro	Glu	Leu	Lys	Asn	Thr	Val	Lys	Ser	Leu		Gly	Gly	Val	He	Thr
145					150					155					160
Asn	Asn	Va]	Val		Leu	Asp	Cys	Glu		Val	Ser	Gln	Thr	Ala	Glu
				165					170					175	
G] u	Phe	Tyr		Val	Arg	Cys	Gln		Ala	Asp	Met	Lys	Asn	He	Tyr
			180					185					190		
Glu	Ser		Asp	Glu	Val	Thr		Lys	Asp	Thr	Leu		Gly	Asp	Asn
	_	195					200					205			
Met		Thr	Cys	Ser	His		Gly	Lys	Lys	Val	Arg	Ala	Glu	Lys	Arg
	210					215				_	220				
	Cys	Phe	Lys	Lys		Pro	Arg	He	Leu		Phe	Asn	Thr	Met	
225					230					235	_				240
Tyr	Thr	Phe	Asn		Val	Thr	Met	Met		Glu	Lys	Val	Asn		His
				245					250		_			255	
Phe	Ser	Phe		Leu	Arg	Leu	Asp		Thr	Pro	Tyr	Thr		Asp	Phe
,		0.1	260	a				265	٥.	Di		6 .1	270	6	
Leu	Met	Gly	Lys	Ser	Glu	Arg		Glu	GI y	Phe	Lys	Glu	Val	Ser	Asp
		·//h					200					.7× h			

His	Ser 290	Lys	Asp	Ser	Glu	Ser 295	Tyr	Glu	Tyr	Asp	Leu 300	He	Gly	Val	Thr
Val		Thr	G1v	Thr	Ala		Glv	G1 v	His	Tyr		Ser	Phe	He	Arø
305	1110		01)		310	,1015	01,	O. J.	11.10	315	. , .	501			320
	116	Val	Aen	Pro		Ala	Tur	Lve	Aen	Asn	Lve	Trn	Tyr	Lau	
пэр	110	, (11	пэн	325	1113	11 G	ı yı	173.0	330	поп	Lys	Чп	131	335	THE
Acn	Acn	Ala	£1u		Lvc	Pro	Pho	Acn		Ala	Cln.	Lou	Ala		Clu
Иэн	изр	MIG	340	1 (1)	rys	110	1110	345	261	MIG	OIH	Leu	350	561	Olu
Cvc	Dho	Cl _v		Clu	Mot	Thr	Thr		Thr	Tyr	Acn	Sor		Thr	Acn
Cys	THE	355	ОТУ	01u	Met	1111	360	Lys	1111	1 9 1	nsp	365	vai	1111	лър
Lua	Dha		Aan	Dha	Con	Dha		Luc	Thu	u; a	Con		Т	Mot	Lou
Lys		Met	Asp	rne	3e.r		GIU	Lys	1111.	His		Ala	Tyr	Me t	Leu
DI .	370	l	A	Mark	C1	375	C1	C1	CI	A	380	Α	C1	т	1
	Tyr	Lys	Arg	мет		Pro	GTU	GIU	01 u	Asn	GTY	Arg	GIU	I ÿ I	
385	A	<i>11</i> . 1	C	C	390	1	1	C1	т	395	т	D2 .	Δ	Δ	400
rne	Asp	vai	ser		GIU	Leu	Leu	GIU		lle	irp	111 S	Asp		мет
C 1	D)		C1	405	,		7.1	D)	410	10.2	TI.	T	DI .	415	DI.
GIn	Pne	Leu		Asp	Lys	Asn	116		Glu	His	inr	lyr		GIY	Pne
	T	0.1	420	0	C	0	7.1	425	C	TI	,	n	430	n	
Met	Trp		Leu	Cys	Ser	Cys		Pro	Ser	Thr	Leu		Asp	Pro	Lys
		435			m)	4.1	440	,	C	Tr.	c	445	v: 1		61
Ala		Ser	Leu	Met	Ihr		Lys	Leu	Ser	Thr		Phe	Val	Leu	61u
	450					455		_			460				
	Phe	He	His	Ser		Glu	Lys	Pro	Thr	Met	Leu	GIn	Trp	He	
465					470					475		_		_	480
Leu	Leu	Thr	Lys		Phe	Asn	Asn	Ser		Ala	Ala	Cys	Glu		Phe
				485					490					495	
Leu	Asp	Arg		Ala	Asp	Asp	Asp		Trp	Pro	Met	Gln		Leu	He
			500					505					510		
Lys	Cys		Asn	Gln	He	Va]	Arg	Gln	Met	Phe	Gln		Leu	Cys	He
		515					520					525			
His		He	Gln	Arg	Leu		Pro	Val	His	Ala		Leu	Tyr	Leu	Gln
	530					535					540				
Pro	Gly	Met	Glu	Asp		Ser	Asp	Asp	Met	Asp	Thr	Ser	Val	Glu	
545					550					555					560
He	Gly	Gly	Arg	Ser	Cys	Val	Thr	Arg	Phe	Val	Arg	Thr	Leu	Leu	Leu
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116	Met	GIU	580	GIY	vai	Lys	Pro	585	ser	Lys	HIS	Leu	590	GIU	lyr
Phe	Ala	Phe	Leu	Tyr	Glu	Phe	Ala	Lys	Met	G1 y	Glu	Glu	Glu	Ser	Gln
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Phe	Leu	Leu	Ser	Leu	Gln	Ala	He	Ser	Thr	Met	Val	His	Phe	Tyr	Met
	610					615					620				
Gly	Thr	Lys	Gly	Pro	Glu	Asn	Pro	Ġ1n	Val	Glu	Val	Leu	Ser	Glu	Glu
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G1u	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	11e	Leu	Ser	Leu	Ala	Glu
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Glu	Lys	Tyr	Arg	Pro	Ala	Ala	Leu	Glu	Lys	Met	Ile	Ala	Leu	Val	Ala
			660					665					670		
Leu	Leu	Val	Glu	Gln	Ser	Arg	Ser	Glu	Arg	His	Leu	Thr	Leu	Ser	Gln
		675					680					685			
Thr	Asp	Met	Ala	Ala	Leu	Thr	G1 y	Gly	Lys	G1 y	Phe	Pro	Phe	Leu	Phe
	690					695					700				
G1n	His	lle	Arg	Asp	Gly	He	Asn	He	Arg	Gln	Thr	Cys	Asn	Leu	He
705					710					715					720
Phe	Ser	Leu	Cys	Arg	Tyr	Asn	Asn	Arg	Leu	Ala	Glu	His	He	Val	Ser
				725					730					735	
Met	Leu	Phe	Thr	Ser	He	Ala	Lys	Leu	Thr	Pro	Glu	Ala	Ala	Asn	Pro
			740					745					750		
Phe	Phe	Lys	Leu	Leu	Thr	Met	Leu	Met	Glu	Phe	Ala	Gly	Gly	Pro	Pro
		755					760					765			
Gly	Met	Pro	Pro	Phe	Ala	Ser	Tyr	He	Leu	Gln	Arg	lle	Trp	Glu	Val
	770					775					780				
Пe	Glu	Tyr	Asn	Pro	Ser	Gln	Cys	Leu	Asp	Trp	Leu	Ala	Val	Gln	Thr
785					790					795					800
Pro	Arg	Asn	Lys	Leu	Ala	His	Ser	Trp	Val	Leu	Gln	Asn	Met	Glu	Asn
				805					810					815	
Trp	Va1	Glu	Arg	Phe	Leu	Leu	Ala	His	Asn	Tyr	Pro	Arg	Val	Arg	Thr
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Ser	Ala		Tyr	Leu	Leu	Val		Leu	He	Pro	Ser		Ser	Phe	Arg
		835					840					845			
Gln	Met	Phe	Arg	Ser	Thr	Arø	Ser	Len	Hic	He	Pro	Thr	Arg	Asn	Len

	850					855					860				
Pro	Leu	Ser	p_{ro}	Asp	Thr	Thr	Val	Val	Leu	His	Gln	Val	Tyr	Asn	Val
865					870					875					880
Leu	Leu	Gly	Leu	Leu	Ser	Arg	Ala	Lys	Leu	Tyr	Val	Лѕр	Ala	Ala	Val
				885					890					895	
His	Gly	Thr	Thr	Lys	Leu	Val	Pro	Tyr	Phe	Ser	Phe	Met	Thr	Tyr	Cys
			900					905					910		
Leu	He	Ser	Lys	Thr	Glu	Lys	Leu	Met	Phe	Ser	Thr	Tyr	Phe	Met	Asp
		915					920					925			
Leu	Trp	Asn	Leu	Phe	Gln	Pro	Lys	Leu	Ser	Glu	Pro	Ala	He	Ala	Thr
	930					935					940				
Asn	His	Asn	Lys	Gln	Ala	Leu	Leu	Ser	Phe	Trp	Tyr	Asn	Val	Cys	Λla
945					950					955					960
Asp	Cys	Pro	Glu	Asn	He	Arg	Leu	Пе	Val	Gln	Asn	Pro	Val.	Val	Thr
				965					970					975	
Lys	Asn	He	Ala	Phe	Asn	Tyr	He	Leu	Ala	Asp	His	Asp	Λsp	Gln	Asp
			980					985					990		
Val	Val	Leu	Phe	Asn	Arg	G1y	Met	Leu	Pro	Ala	Tyr	Tyr	Gly	lle	Leu
		995					1000]	1005			
Arg	Leu	Cys	Cys	Glu	Gln	Ser	Pro	Ala	Phe	Thr	Arg	Gln	Leu	Ala	Ser
	Leu 1010	Cys	Cys	G]u		Ser 1015	Pro	Ala	Phe		Arg 1020	Gln	Leu	Ala	Ser
]	1010		Cys		1	1015				3	1020				
]	1010 Gln			G1n	1	1015			Asn	3	1020			Ala	
His 1025	1010 Gln 5	Asn		Gln	Trp 1030	1015 Ala	Phe	Lys	Asn	Leu 1035	1020 Thr	Pro	His	Ala	Ser 1040
His 1025	1010 Gln 5	Asn	lle Gly	Gln	Trp 1030	1015 Ala	Phe	Lys Leu	Asn	Leu 1035	1020 Thr	Pro	His Gln	Ala	Ser 1040
His 1025 Gln	1010 Gln 5 Tyr	Asn Pro	lle Gly	Gln : Ala 1045	Trp 1030 Val	Ala Glu	Phe Glu	Lys Leu	Asn Phe	Leu 1035 Asn	1020 Thr Leu	Pro Met	His Gln	Ala Leu 1055	Ser 1040 Phe
His 1025 Gln	1010 Gln 5 Tyr	Asn Pro Gln	lle Gly	Gln : Ala 1045	Trp 1030 Val	Ala Glu	Phe Glu Arg	Lys Leu	Asn Phe	Leu 1035 Asn	1020 Thr Leu	Pro Met Glu	His Gln	Ala Leu 1055	Ser 1040 Phe
His 1025 Gln 11e	1010 Gln 5 Tyr Ala	Asn Pro Gln	lle Gly Arg	Gln Ala 1045 Pro	Trp 1030 Val Asp	Ala Glu Met	Phe Glu Arg	Lys Leu Glu 1065	Asn Phe 1050 Glu	Leu 1035 Asn Glu	Thr Leu Leu	Pro Met Glu	His Gln Asp 1070	Ala Leu 1055 Ile	Ser 1040 Phe Lys
His 1025 Gln 11e	Gln Tyr Ala	Asn Pro Gln	Gly Arg	Gln Ala 1045 Pro	Trp 1030 Val Asp	Ala Glu Met	Phe Glu Arg	Lys Leu Glu 1065	Asn Phe 1050 Glu	Leu 1035 Asn Glu	Thr Leu Leu Arg	Pro Met Glu	His Gln Asp 1070	Ala Leu 1055 Ile	Ser 1040 Phe Lys
His 1028 Gln 11e Gln	1010 Gln 5 Tyr Ala Phe	Asn Pro Gln Lys 1075	Gly Arg	Gln Ala 1045 Pro Thr	Trp 1030 Val Asp	Ala Glu Met	Phe Glu Arg Ser 1080	Lys Leu Glu 1065 Cys	Asn Phe 1050 Glu Tyr	Leu 1035 Asn Glu Leu	Thr Leu Leu Arg	Pro Met Glu Cys 1085	His Gln Asp 1070 Leu	Ala Leu 1055 Ile Asp	Ser 1040 Phe Lys Gly
His 1028 Gln 11e Gln Arg	1010 Gln 5 Tyr Ala Phe	Asn Pro Gln Lys 1075	Gly Arg 1060 Lys	Gln Ala 1045 Pro Thr	Trp 1030 Val Asp Thr	Ala Glu Met	Phe Glu Arg Ser 1080	Lys Leu Glu 1065 Cys	Asn Phe 1050 Glu Tyr	Leu 1035 Asn G1u Leu	Thr Leu Leu Arg	Pro Met Glu Cys 1085	His Gln Asp 1070 Leu	Ala Leu 1055 Ile Asp	Ser 1040 Phe Lys Gly
His 1029 Gln 11e Gln Arg	1010 Gln 5 Tyr Ala Phe Ser	Asn Pro Gln Lys 1075 Cys	Gly Arg 1060 Lys	Gln Ala 1045 Pro Thr	Trp 1030 Val Asp Thr	Met Leu 1095	Phe Glu Arg Ser 1080	Lys Leu Glu 1065 Cys	Asn Phe 1050 Glu Tyr	Leu 1035 Asn Glu Leu	Thr Leu Arg Arg	Pro Met Glu Cys 1085	His Gln Asp 1070 Leu Leu	Ala Leu 1055 Ile Asp	Ser 1040 Phe Lys Gly
His 1029 Gln 11e Gln Arg	1010 Gln 5 Tyr Ala Phe Ser 1090 Asp	Asn Pro Gln Lys 1075 Cys	Gly Arg 1060 Lys	Gln Ala 1045 Pro Thr Arg	Trp 1030 Val Asp Thr	Met Leu 1095	Phe Glu Arg Ser 1080	Lys Leu Glu 1065 Cys	Asn Phe 1050 Glu Tyr Ala	Leu 1035 Asn Glu Leu	Thr Leu Arg Arg	Pro Met Glu Cys 1085	His Gln Asp 1070 Leu Leu	Ala Leu 1055 Ile Asp Leu	Ser 1040 Phe Lys Gly
His 1028 Gln 11e Gln Arg	Gln Tyr Ala Phe Ser 1090 Asp	Asn Pro Gln Lys 1075 Cys Glu	Gly Arg 1060 Lys	Gln Ala 1045 Pro Thr Arg	Trp 1030 Val Asp Thr Leu 1110	Ala Glu Met Leu 1095 Leu	Phe Glu Arg Ser 1080 Ile	Lys Leu Glu 1065 Cys Ser	Asn Phe 1050 Glu Tyr Ala Phe	Leu 1035 Asn GIu Leu Phe Asn	Thr Leu Arg Arg 1100 Arg	Pro Met Glu Cys 1085 lle Gly	His Gln Asp 1070 Leu Leu	Ala Leu 1055 Ile Asp Leu	Ser 1040 Phe Lys Gly Glu Leu
His 1028 Gln 11e Gln Arg	Gln Tyr Ala Phe Ser 1090 Asp	Asn Pro Gln Lys 1075 Cys Glu	Gly Arg 1060 Lys Trp Asp	Gln Ala 1045 Pro Thr Arg	Trp 1030 Val Asp Thr Leu 1110	Ala Glu Met Leu 1095 Leu	Phe Glu Arg Ser 1080 Ile	Lys Leu Glu 1065 Cys Ser Val	Asn Phe 1050 Glu Tyr Ala Phe	Leu 1035 Asn GIu Leu Phe Asn	Thr Leu Arg Arg 1100 Arg	Pro Met Glu Cys 1085 lle Gly	His Gln Asp 1070 Leu Leu Leu Glu	Ala Leu 1055 Ile Asp Leu	Ser 1040 Phe Lys Gly Glu Leu

	11	140				145]	150		
Ser Val	Leu L	ys S	Ser 1	Thr Ar	g P.ro	Tyr	Leu	Gln	Arg	Lys	Asp	Val	Lys
1	155				1160				1	1165			
Gln Ala	Leu I	lle (Gln 1	[rp G]	n Glu	Arg	Пе	Glu	Phe	Ala	His	Lys	Leu
1170				117	5			1	180				
Leu Thr	Leu L	Leu /	Asn S	Ser Ty	r Ser	Pro	Pro	Glu	Leu	Arg	Asn	Ala	Cys
1185			11	190			1	1195				1	200
lle Asp	Val l	Leu l	Lys (Glu Le	u Val	Leu	Leu	Ser	Pro	His	Asp	Phe	Leu
		12	205]	1210				1	215	
His Thr	Leu \	Val I	Pro F	Phe Le	u Gln	His	Asn	His	Cys	Thr	Tyr	His	His
	. 12	220			2	1225]	1230		
Ser Asn	He I	Pro !	Met S	Ser Le	u Gly	Pro	Tyr	Phe	Pro	Cys	Arg	Glu	Asn
1	235				1240]	1245			
He Lys	Leu I	lle (Gly C	Gly Ly	s Ser	Asn	He	Arg	Pro	Pro	Arg	Pro	Glu
1250				125	5				1260				
Leu Asn	Met (Cys 1	Leu I	Leu Pr	o Thr	Met	Val	G] u	Thr	Ser	Lys	G1 y	Lys
1265			12	270]	1275]	1280
Asp Asp	Val 1	Tvr /	Asp A	Arg Me	t Leu	Leu	Asp	Tyr	Phe	Phe	Ser	Tyr	His
mop mop				•									
пор пор			285	Ü]	1290					295	
Gln Phe		13	285				1290				1		
	lle l	13	285		s Arg		1290			Cys	1		
	lle l	12 His 1 300	285 Leu 1	Leu Cy	s Arg	Val 1305	1290 Ala	lle	Asn	Cys	6]u 1310	Lys	Phe
Gln Phe Thr Glu	lle l	12 His 1 300	285 Leu 1	Leu Cy	s Arg	Val 1305	1290 Ala	lle	Asn Ala	Cys	6]u 1310	Lys	Phe
Gln Phe Thr Glu	11e 1 13 Thr 1 315	l: His l 300 Leu	285 Leu l Val l	Leu Cy Lys Le	s Arg u Ser 1320	Val 1305 Val	1290 Ala Leu	lle Val	Asn Ala	Cys Tyr 1325	61u 1310 61u	Lys	Phe Leu
Gln Phe Thr Glu l	11e 1 13 Thr 1 315	l: His l 300 Leu	285 Leu l Val l	Leu Cy Lys Le	s Arg u Ser 1320 e Pro	Val 1305 Val	1290 Ala Leu	lle Val Trp	Asn Ala	Cys Tyr 1325	61u 1310 61u	Lys	Phe Leu
Gln Phe Thr Glu I Pro Leu	11e 1 13 Thr 1 315 His I	His I 300 Leu Y	285 Leu I Val I Ala I	Leu Cy Lys Le Leu Ph	s Arg u Ser 1320 e Pro 5	Val 1305 Val Lys	1290 Ala Leu Leu	lle Val Trp	Asn Ala Thr 1340	Cys Tyr 1325 Glu	Glu 1310 Glu Leu	Lys Gly Cys	Phe Leu Gln
Gln Phe Thr Glu I Pro Leu 1330	11e 1 13 Thr 1 315 His I	His I 300 Leu Y	285 Leu l Val l Ala l	Leu Cy Lys Le Leu Ph	s Arg u Ser 1320 e Pro 5 s Asn	Val 1305 Val Lys Cys	1290 Ala Leu Leu	lle Val Trp Lys	Asn Ala Thr 1340 Leu	Cys Tyr 1325 Glu Leu	Glu 1310 Glu Leu Cys	Lys Gly Cys Glu	Phe Leu Gln
Gln Phe Thr Glu Pro Leu 1330 Thr Gln	11e 1 13 Thr 1 315 Ilis 1	l: His 300 Leu Leu Ala	285 Leu l Val l Ala l Met S	Leu Cy Lys Le Leu Ph 133 Ser Ly 350	s Arg u Ser 1320 e Pro 5 s Asn	Val 1305 Val Lys Cys	1290 Ala Leu Leu	Trp Lys	Asn Ala Thr 1340 Leu	Cys Tyr 1325 Glu Leu	Glu 1310 Glu Leu Cys	Lys Gly Cys Glu	Phe Leu Gln Asp 1360
Gln Phe Thr Glu Pro Leu 1330 Thr Gln 1345	11e 1 13 Thr 1 315 Ilis 1	l: His l 300 Leu l Leu l Ala l	285 Leu l Val l Ala l Met S	Leu Cy Lys Le Leu Ph 133 Ser Ly 350	s Arg u Ser 1320 e Pro 5 s Asn	Val 1305 Val Lys Cys	1290 Ala Leu Leu	Trp Lys	Asn Ala Thr 1340 Leu	Cys Tyr 1325 Glu Leu	Glu 1310 Glu Leu Cys	Lys Gly Cys Glu	Phe Leu Gln Asp 1360
Gln Phe Thr Glu Pro Leu 1330 Thr Gln 1345	Thr 1315 Ilis I	l: His l 300 Leu l Leu l Ala l	285 Leu I Val I Ala I Met S Glu 1 365	Leu Cy Lys Le Leu Ph 133 Ser Ly 350 Tyr 11	s Arg u Ser 1320 e Pro 5 s Asn e Lys	Val 1305 Val Lys Cys	1290 Ala Leu Leu Ile Ile 1370	Trp Lys 1355 Leu	Asn Ala Thr 1340 Leu Met	Cys Tyr 1325 Glu Leu Asp	Glu 1310 Glu Leu Cys	Cys Glu Arg	Phe Leu GIn Asp 1360 Thr
Gln Phe Thr Glu Pro Leu 1330 Thr Gln 1345 Pro Val	The I Thr I 315 His I Ser / Asn /	l: His l 300 Leu l Leu l Ala l	285 Leu I Val I Ala I Met S Glu 1 365	Leu Cy Lys Le Leu Ph 133 Ser Ly 350 Tyr 11	s Arg u Ser 1320 e Pro 5 s Asn e Lys	Val 1305 Val Lys Cys	1290 Ala Leu Leu Ile Ile 1370	Trp Lys 1355 Leu	Asn Ala Thr 1340 Leu Met	Cys Tyr 1325 Glu Leu Asp	Glu 1310 Glu Leu Cys	Cys Glu Arg	Phe Leu GIn Asp 1360 Thr
Gln Phe Thr Glu Pro Leu 1330 Thr Gln 1345 Pro Val	The I Thr I 315 His I Ser / Asn / 1:	His I 300 Leu Y Ala I Ala I Asn I	285 Leu I Val I Ala I Glu 1 365 Asn I	Leu Cy Lys Le Leu Ph 133 Ser Ly 350 Tyr 11	s Arg u Ser 1320 e Pro 5 s Asn e Lys	Val 1305 Val Lys Cys Cys Thr 1385	Leu Leu He He 11e 1370 Phe	Trp Lys 1355 Leu Met	Asn Ala Thr 1340 Leu Met	Cys Tyr 1325 Glu Leu Asp	Glu 1310 Glu Leu Cys Glu Phe 1390	Cys Glu Arg 1375 Leu	Phe Leu GIn Asp 1360 Thr
Gln Phe Thr Glu I Pro Leu I330 Thr Gln I345 Pro Val Phe Leu Lys Val	The I Thr I 315 His I Ser / Asn / 1:	His I 300 Leu Y Ala I Ala I Asn I	285 Leu I Val I Ala I Glu 1 365 Asn I	Leu Cy Lys Le Leu Ph 133 Ser Ly 350 Tyr 11	s Arg u Ser 1320 e Pro 5 s Asn e Lys	Val 1305 Val Lys Cys Cys Thr 1385	Leu Leu He He 11e 1370 Phe	Trp Lys 1355 Leu Met	Asn Ala Thr 1340 Leu Met Thr	Cys Tyr 1325 Glu Leu Asp	Glu 1310 Glu Leu Cys Glu Phe 1390	Cys Glu Arg 1375 Leu	Phe Leu GIn Asp 1360 Thr
Gln Phe Thr Glu I Pro Leu I330 Thr Gln I345 Pro Val Phe Leu Lys Val	The 1 13 15 11 15 1 15 1 15 1 15 1 15 1 15	His I 300 Leu Y Ala ! Ala ! Asn A 380 Ser (285 Leu I Val I Ala I Met S Glu 1 365 Asn I	Leu Cy Lys Le Leu Ph 133 Ser Ly 350 Tyr 11 He Va	s Arg u Ser 1320 e Pro 5 s Asn e Lys l Tyr e Ser 1400	Val 1305 Val Lys Cys Cys Thr 1385 Glu	Leu Leu He He He Ala	Trp Lys 1355 Leu Met	Asn Ala Thr 1340 Leu Met Thr	Cys Tyr 1325 Glu Leu Asp His Ala 1405	Glu 1310 Glu Leu Cys Glu Phe 1390 Asn	Cys Glu Arg 1375 Leu Leu	Phe Leu Gln Asp 1360 Thr Leu
Gln Phe Thr Glu I Pro Leu 1330 Thr Gln 1345 Pro Val Phe Leu Lys Val	The 1 13 15 11 15 1 15 1 15 1 15 1 15 1 15	His I 300 Leu Y Ala ! Ala ! Asn A 380 Ser (285 Leu I Val I Ala I Met S Glu 1 365 Asn I	Leu Cy Lys Le Leu Ph 133 Ser Ly 350 Tyr 11 He Va	s Arg u Ser 1320 e Pro 5 s Asn e Lys l Tyr e Ser 1400 u 11e	Val 1305 Val Lys Cys Cys Thr 1385 Glu	Leu Leu He He He Ala	Trp Lys 1355 Leu Met Asn	Asn Ala Thr 1340 Leu Met Thr	Cys Tyr 1325 Glu Leu Asp His Ala 1405	Glu 1310 Glu Leu Cys Glu Phe 1390 Asn	Cys Glu Arg 1375 Leu Leu	Phe Leu Gln Asp 1360 Thr Leu

 1425
 1430
 1435
 1440

 Gly Asp Leu Arg Ala Leu Ala Leu Leu Leu Ser Val His Thr Pro Lys
 1445
 1450
 1455

 Gln Leu Asn Pro Ala Leu He Pro Thr Leu Gln Glu Leu Leu Ser Lys
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 1465
 1470

 Cys Arg Thr Cys Leu Gln Gln Arg Asn Ser Leu Gln Glu Gln Glu Ala
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<211> 190

<212> PRT

145

<213> Homo sapiens

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Lys Glu Gly Glu Lys Ala Pro Gly Glu Asp Thr Pro Arg Met Pro Gly

Lys Ser Glu Gly Ser Ser Asp Leu Glu Asn Thr Pro Gly Pro Asp Ala

155

160

150

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<212> PRT

<213> Homo sapiens

<400> 3792

Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met Val Arg Thr Phe 1 5 10 15

Cys	Pro	Pro	Pro	Leu	Pro	Lys	Pro	Ser	Ser	Thr	Thr	Pro	Thr	Pro	Leu
			20					25					30		
Val	Ser	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Ser	Asp	Lys	Val	Asp	Asn	Glu
		35					40					45			
Leu	Lys	Asn	Leu	G] u	His	Leu	Ser	Ser	Phe	Ser	Ser	Asp	Glu	Asp	Asp
	50					55					60				
Pro	Gly	Tyr	Ser	G1n	Asp	Ala	Tyr	Lys	Ser	Val	Ser	Thr	Pro	Leu	Thr
65					70					75					80
Thr	Leu	Asp	Ala	Thr	Ser	Asp	Lys	Lys	Lys	Lys	Thr	Glu	Ala	Leu	Gln
				85					90					95	
Val	Ala	Thr	Thr	Ser	Pro	Thr	Ala	Asn	Thr	Thr	Gly	Thr	Ala	Thr	Thr
			100					105					110		
Ser	Ser	Thr	Thr	Val	Gly	Ala	Val	Lys	Gln	Glu	Pro	Leu	His	Ser	Thr
		115					120					125			
Ser	Tyr	Ala	Val	Asn	He	Leu	G] u	Asn	He	Ser	Ser	Ser	Glu	Ser	Ser
	130					135					140				
-	Pro	He	Glu	Leu		Gly	Leu	Pro	Ser	_	Gln	Phe	Ala	Lys	_
145					150					155					160
Gln	Asp	Thr	Val		He	Glu	Gly	Phe		Asp	Glu	Glu	Asp		Glu
				165	0.1				170			ъ.		175	
Ser	Gly	G1 y		Gly	GIn	Tyr	Arg		Arg	Asp	Glu	Phe		Val	Lys
	0.1		180	0.1	m.	151		185			•	T.I.	190		6.1
He	Glu		He	61u	Ihr	Phe		6Ju	Ala	Leu	Lys	Thr	61 y	Lys	GJU
D	D	195	7.1	т		17 1	200		. 1			205		101	v. 1
Pro		Ala	11e	rp	Lys		Gin	Lys	Ala	Leu		Gln	Lys	rne	val
Dwo	210	71.	A 22 cr	Aon	Cl.	215	Ana	Cl.,	Dha	110	220	Tha	Aan	C.s.r.	Т
225	GIU	116	MIG	ASP	230	GIH	MIG	Gju	rne	235	міа	Thr	ASII	261	240
	Gly	Tyr	Pho	Clv		Λ1.0	Lvc	Sor	Lve		Lvc	Arg	Ha	Tyr	
Leu	Uly	1) 1	THE	245	asp	ма	Lys	261	250	ıyı	Lys	лів	116	255	vaj
lvc	Pho	110	Glu		Ala	Acn	Lvc	Lve		Tyr	Val	Arg	Val		Sor
Lys	1 110	116	260	ASII	мта	пъп	rys	265	Olu	1 y 1	101	Al g	270	Cys	501
lve	Lve	Pro		Asn	lve	Pro	Sor		Thr	He	Ara	Thr		Gln	Ala
rio	rig	275	mg	11611	rio	110	280	0111	1111	116	шв	285	, (1)	9111	i i i ci
lve	Pro		Ser	Ser	Ser	lve		Ser	Asn	Pro	l en	Ala	Ser	lve	Thr
ى و د.د	290	001	UU3	501	001	295	1113	001			300	413 CI	0.1		